

Original Correspondence.

THE RATING OF COAL MINES.

SIR,—I feel indebted to your correspondent, "Observer," for the "brief" and clear review of my "views" on the Rating of Coal Mines, also for his equally impartial review of the letter of one whom he describes as "one of my opponents," the former communicated to your Journal of the 18th inst., and the latter of the 27th. I agree with "Observer" that the complaint in reference to the rating of coal mines is "want of uniformity rather than over-taxation;" in proof of which I can refer to a colliery in this neighbourhood rated on nearly 6000*l.*, whereas in a township not far distant another colliery, nearly as large, is rated at little more than one-eighth of this amount.

The first named colliery is situated in a *town parish*, where the parish officers are elected by the ratepayers. The second is situated in a *colliery township*, where the township officers are the servants of the coalowner.

In stating my views on the rating of coal mines, I admitted my figures were vague, and subject to correction; yet, in the course of the discussions which I have had since the publication of my letter, I have heard nothing advanced to alter my opinion as to the correctness of the principle of estimating the value of a colliery. I have, however, seen that in carrying out the principle propounded an alteration of the basis of calculation is required.

I find on examining colliery accounts that the materials and labour for repairs, and also all the renewals of horses and tubs, are charged in the working expenses of the colliery, and, therefore, provided for in the 60 per cent. allowed as working expenses; there is, also, an element in valuing collieries which I have overlooked, and for the correction of which I am indebted to "one of my opponents." The omission to which I refer is the fund to provide for the redemption or reproduction of the money invested in winning the colliery, or, as some call it, the "guarantee." In the rating of gasworks and railways, the Court of Queen's Bench have held that, in addition to the deduction for ordinary repairs, a further sum should be allowed for renewal or reproduction where the works are of a perishable nature.

It cannot be said that collieries are of a perishable nature, and renewable, for no amount could renew or reproduce a coal mine. They are clearly, however, of an *exhaustible* nature, and no person would invest his money in a colliery unless, in addition to the interest on the capital invested in winning the same, he obtained, as rent, a sum to refund or reproduce the amount which he had expended. Such an allowance, I think, would fairly come within the meaning of the statutory deduction of "other expenses" specified in the first section of the 6 and 7 Will. IV., cap. 96, as necessary to maintain the hereditaments in a state to command such rent.

Of course, the amount of allowance in this respect will depend entirely upon the sum expended, and the probable life or duration of the coal mine.

"One of my opponents" estimates the cost of the colliery which, in my sketch for rating, I illustrated to cost 15,000*l.*, and the life or duration at 14 years, which, by the way, I think a very short life or period for working a mine which has cost 15,000*l.* Yet, for the sake of illustration, I adopt his figures.

To provide a fund to renew or reproduce 15,000*l.* in 14 years (supposing the money to be invested at 5 per cent., which is the same rate I allow as interest on tenant's capital) will require 5.102 per cent. per annum, or 765*l.*, and not 1071*l.*, which my "opponent" supposes.

My amended sketch for the valuation of a colliery stands thus—

Gross value of coal produced.....	£12,000 0 0
Working expenses at 60 per cent., and other expenses, as before stated.....	8,700 0 0
Gross profits.....	£ 3,300 0 0
Allow 25 per cent. interest, and 25 per cent. tenant's profits on tenant's capital of 15,000 <i>l.</i> , as before stated.....	1,482 0 0
Gross rent.....	£ 1,818 0 0
Deduct fund to reproduce 15,000 <i>l.</i> at the end of 14 years.....	765 0 0
Rateable value.....	£ 1,053 0 0

The allowances in my former sketch of rating of 138*l.* for renewals, and 286*l.* 10*s.* for repairs, are provided for in the deductions already allowed.

Referring to the views of "one of my opponents" on the subject of rating collieries, I think he is correct in taking the profits for the purposes of assessment on an average of a certain number of years; this would provide for loss from extraordinary accidents or otherwise—correcting his figures as to the amount to be provided as a fund for the renewal or reproduction, in 14 years, of the 15,000*l.* expended in winning the colliery, his amended estimate will stand thus—

Balance of profit and loss account.....	£ 3,300 0 0
Amount to provide for renewal of 15,000 <i>l.</i>	£ 765 0 0
Interest and depreciation of stock.....	1200 0 0 = 1,965 0 0
Gross rent.....	£ 1,818 0 0
Deduct 1/6th for sundries.....	222 10 0
Rateable value.....	£ 1,112 10 0

Showing only a difference of 59*l.* 10*s.*, or little more than 5 per cent. difference between "one of my opponent's" scheme and mine.

"Observer" asks,—"Would it not be better, on the whole, to assess upon the vend, say 3*d.* per ton, upon all coal raised, and assume that the profits per ton are equal; or let all coal raised be calculated at 2*s.* per ton?"

This scheme might be very convenient, and so would the uniform assessment of all houses according to their size, irrespective of quality or situation; but no one would admit such a principle of assessment either to be equal or just, as houses vary in value according to quality and situation—so do coals. The profits per ton on coals must depend much upon the quality, and upon the situation or locality of the colliery. Coals produced within half-a-mile of the place of shipment are of much more value at the pit's mouth (which must be the basis of value) than coals produced at a distance of 15 or 20 miles from it.

T. F. HEDLEY.
Sunderland, Dec. 31.

WORKING COAL—"PILLAR AND STALL" v. "LONG WALL."

SIR,—I am somewhat amused by Mr. Goodwin's closing remarks in his elaborate paper of Dec. 20, wherein he says—"Space will not permit of any further remarks, or I should have pointed out many objections to the use of Mr. Naysmith's so-called pillar and stall system that I have not touched upon." What has he said against the system, or what can he, as a conscientious man, say against the system? He does not say anything, but begins at the very outset with personalities. He thus begins—"Since Mr. Naysmith has been so candid as to admit that his practical experience has been derived under the guidance of some of the most practical mining engineers of the day;" this is evidently too humble an admission on my part to suit Mr. Goodwin's more refined taste, he, therefore (in a quiet way, peculiar to himself), tries to insinuate that I am little better than a pupil. Is this the case, Mr. Goodwin? Did you never require the advice of a practical mining engineer? I should think not, by his high-sounding speech; he was born perfect, I suppose, and never required the assistance of anyone; and the person Mr. Goodwin showed my plans and sections to, though of 40 years' experience, is not more enlightened in mining matters than he ought to be. However, I know that it is not possible to meet everyone's ideas, therefore I am not surprised to hear that such expressions of feeling have been given way to, but this is easily accounted for, in some cases where people are prejudiced to one system. What I have said before I will repeat—that the system of working one vein may not answer in another in the same district. In this view I am corroborated by several gentlemen of over 40 years' experience (some of whom have been further from home than Mr. Goodwin), who have had many difficult seams to work on many different systems. Mr. Goodwin says—"But I think even Mr. Naysmith will admit that the difficulties cannot be very great in arriving at the conclusion that it is unwise to condemn any system before trying it. It is against this unwise course that I shall have a few words to say in the shape of advice to Mr. Naysmith; my advice is [Mr. Goodwin's, of course], first satisfy yourself that that which you represent or understand to be a certain system is really what you believe or represent it to be." What does Mr. Goodwin mean by all this? Does he wish me to become a pupil of his, and adopt all his ideas? I cannot do this, Mr. Goodwin; but I am afraid you misunderstand the meaning of all this writing, as I always gave you credit for more candour whenever I read any of your communications in the Journal. My object in writing first was to confute the arguments brought forward by Mr. Shepherd against the mining engineers of South Wales. I do not wish to dictate to any person how coal should be worked elsewhere, but I cannot, and will not, allow that any person, from any part of England, who has not had practical experience in Wales is so qualified to give an opinion as to the working of different systems as a person who has had many years' practical experience in England and in this country, of whom there are many in Wales. Mr. Goodwin says—"If Mr. Naysmith had not furnished your readers with

diagrams illustrative of what he calls the long wall system, some of his objections might not be without weight, but since he had done so, any arguments that he may employ against the long wall system, when skillfully conducted, must have no meaning, inasmuch as he does not represent the long wall system in his diagrams."

Now, Mr. Goodwin, I think you charged Mr. Shepherd with trying to misrepresent some of your statements last week. What are you doing in the passage I have now quoted from your paper? What is the meaning of the term long wall? Does it not apply to a system of taking away the whole of the coal at once? And are there not many modifications of it, as in the pillar and stall? Did I ever say in any of my papers that it was the most improved method of long wall work? On the contrary, I know it to be otherwise; and it is quite different to what I have seen worked elsewhere. But I may tell Mr. Goodwin, that his most improved method of long wall work could not be worked at all in the two seams called the 4 feet and 9 feet veins. The 4 feet varies in thickness from 6 to 7 feet, and the 9 feet from that thickness to 18 feet; and in some cases it may be found so small as 3 feet. But, as I said before, the long wall is worked as represented in my diagrams in some collieries in this district; therefore I thought it might be of service to some parties to point out its defects. It would have been quite incorrect and useless for me to have represented the system as worked in Mr. Goodwin's district, I therefore faithfully and truthfully represented the system as worked here, and because I have done so Mr. Goodwin says I am not acquainted with the long wall system of getting coal; he will, I trust, find out his mistake before long. Mr. Goodwin says he has seen several collieries worked on the pillar and stall, as shown in my diagrams, and gives us some (of what he calls) interesting facts of the last he saw worked on this principle. Now, I do not disbelieve this, Mr. Goodwin, but I would like to ask a few questions about this wonderful colliery. First, then, what is it called?—2. How many tons per day did the colliery work on the pillar and stall system?—3. The number of tons per day worked by the long wall system?—4. The thickness of the seam, and does it generate much inflammable gas? Mr. Goodwin says—"During the time we were going through the workings I challenged (champion-like, like) the manager as being unable to show me which way the air was circulating by the deflections of the flame of a candle." I hope Mr. Goodwin does not wish to quote this as a model of a pillar and stall colliery. I could show Mr. Goodwin extensive collieries worked by this pillar and stall system, which would not only turn the flame of his candle, but extinguish it; and yet it is not safe to work with a naked light; but the air-ways, &c., are not kept by three day men, as described by Mr. Goodwin, as being ample to keep the ventilation. This interesting description of Mr. Goodwin's forcibly reminds me of some small isolated collieries in the North of England, where I have seen the colliers or hewers waiting on the top of the pit, and when they saw a couple of asses approaching with sacks on their backs they descended to their work, knowing they had *trade for the day*; but, Mr. Goodwin, if this colliery were so badly ventilated and worked by safety-lamps as you so interestingly describe, as a friend of humanity, I ask you, what you wanted there with a naked candle?—are there no other and safer means of trying the circulation of the air than by the deflection of a candle? Mr. Goodwin's insinuations about the brattice-cloth do not need comment; but the writer remembers when a few hundreds of yards of this cloth would have done good service, had it been at hand as suggested.

Aberaman Ironworks, Dec. 29.

J. NAYSMITH.

ACCIDENTS IN MINES AND COAL PITS—HOW TO LESSEN AND PREVENT THEM.

SIR,—I have frequently heard of a practical treatise on this subject, but like a great many others, have not read it (until within these few days). It may be possible that others, like myself, who wished to get the pamphlet do not know where it is procurable, and its price. Its title is a "Practical Treatise on Accidents in Coal Mines," &c., by Matthias Dunn, Government Inspector of Mines; price 1*s.*; published by Simpkin, Marshall, and Co., London; and I am so favourably impressed with its really practical hints and propositions for safety in mine workings, that I consider it should be in the hands of every man who can read, who is in any way connected with mines and workings, and that the rules and suggestions should be read to all the working miners who cannot read for themselves, or procure the pamphlet. The certainty is now defined that the accidents are becoming more frequent and more direful in their results than before. This may be attributed to more extensive workings, and proportional risks incurred. But it is equally certain that, although for a few weeks or months local and public sympathy and generous feelings are aroused for the sufferers and their pauperised relatives after each calamity, still, as a whole, there is very little really done to prevent a recurrence of these accidents, although the remedies are known, and continually offered to the proprietors, managers, &c., of these mines and collieries; but because it is not enforced and imperative, this laxity of precaution gradually extends itself into careless or listless indifference. It is sincerely to be hoped that legislative enactments will, ere long, so protect the workmen as to benefit the owners as well; and Mr. M. Dunn's wishes and mine also be realised, by saving life, limbs, and property.—*Milford, S.W., Dec. 30.* W. AUSTIN, C.E.

THE EDMUND'S MAIN COLLIERY EXPLOSION

SIR,—In referring to this calamity in last week's *Mining Journal*, you refer to Mr. Parker's protest against the verdict, and very justly say that no other could reasonably have been expected, but you did not state the grounds of the protest. Mr. Parker contends that the quantity of gas in the dip bord-gate was increased by the unjustifiable rapidity with which the coal was excavated, the men working in shifts or sets, which followed each other in regular succession day and night; the exertions of the men being stimulated by a bonus of 1*l.*, which was given to each of the sets that succeeded in excavating 50 yards of coal within a fortnight. This mode of working resulted in the constant liberation of a large quantity of gas, which made the use of gunpowder highly dangerous. The evidence conclusively proves that gas issued in blowers, and in considerably quantity, from both faces of the dip bord-gate for several weeks before December 8, and had been repeatedly fired by the men in the prosecution of their work; that the gas was fired in the dip bord-gate by a blast of gunpowder on the 4th ult., and was again fired by a naked candle on Saturday, the 6th, when the men were engaged for nearly an hour in putting the fire out; that the use of gunpowder in the dip bord-gate had been attended with great danger to the men employed in the colliery for several weeks before the 8th; and its continued use in blasting the coal after the danger attending that mode of excavating had been so frequently demonstrated was a proceeding reckless on the part of the men, and highly culpable on the part of those who either authorised or permitted it. Mr. Parker also condemned Mr. Mitchell for leaving 238 persons "engaged in so dangerous an occupation as coal mining without the supervision of a competent coal-viewer."

Now at first sight it, no doubt, appears extraordinary that an opportunity should have been allowed for the expression of such opinions, but before passing an opinion it should certainly be considered whether the protest is unanswerable; I would, therefore, ask—Was the 1*l.* bonus given in all parts of the mine, or simply in the part near Swatthe's? I believe it was only near Swatthe's, and the inference is that no one was left unturned to secure the opening of a communication with Swatthe's as speedily as possible. Would not the reaching of Swatthe's shaft have rendered the entire ventilation so perfect that an explosion would have been almost impossible? No one can but condemn the use of gunpowder and naked lights in such a position as they were permitted at Edmund's Main, but we should be careful ere we find mine owners guilty of "manslaughter" because an accident occurs.—*Jan. 1.* A. E.

ELECTRO-MAGNETIC MOTIVE-POWER.

SIR,—Some years since there were great expectations entertained that electro-magnetism could be availed of to produce motive-power; but recently the idea appears to have been altogether abandoned. As the subject is a highly interesting one, I should be glad to learn, through the columns of the Journal, whether anyone is at present engaged in its investigation. I am aware that in January, 1858, you published an abstract of a paper by Dr. Joule, in which he stated that, comparing coal with electricity, the result was as nine to one in favour of the former; and I also read Mr. Donkin's remarks upon that statement—that the results of the decomposition in the battery must be utilised. Mr. Donkin recommended Daniell's battery as the best, the zinc being converted into sulphate of zinc, and the sulphate of copper into metallic copper; but observed that 4*s.* worth of sulphate of copper yielded only 3*s.* worth of metallic copper. It will, of course, be said that these statements are so discouraging that further attempts would be useless; but I think it should be considered that there may be instances where the materials for constructing a battery may be cheaper than coal, an opinion which was, probably, entertained by Mr. Thomas Allan, and led him to remark in a paper read by him before the Society of Arts, that "common sense and a proper deference to the philosophy of common things indicate that electric motive-power will no more supersede steam than steam the water-wheel, as each and all have their own field of operations and functions to fulfil."

Messrs. Cumine and Hunter, in the same year, made the attempt to keep the electro-magnets at similar distances, and to concentrate the power; but I have not heard that their machine was ever applied to any practical extent. Messrs. Pellis and Henry proposed the use of conical magnets, and this seems to have been about the last important effort made.

Now, I am inclined to think that these conical magnets might be availed of. It would appear that if the electro-magnet be made in the form of a cone, and the soft iron in that of a conical shell, magnets of any strength could be made in a very limited space. I am aware such magnets would be considered open to the objection that the attraction would not be direct, but I believe the advantages would outweigh the disadvantages. Another useful arrangement, I think, would be to arrange the magnets like books in a book-case, making the shelves of soft iron attached to each other, and connected with the beam by a connecting-rod close to the fulcrum; by this means a direct attraction could be obtained, and at the same time an almost unlimited amount of power. I cannot think so enormous a power as that of electricity should be lost, and feel fully convinced that there are electricians ingenious enough to render its use commercially economic. In considering electric motive-power, the case appears to me to be very different from that of the electric light, and for this reason—light loses so much in distance, that if electricity were substituted for gas in the streets it would be necessary to have one electric lamp for each 12 gas lamps replaced, but as a motive-power electricity could be applied in small quantities, and none need be lost.

G. F.

AUSTRIA, AND COMMERCIAL ENTERPRISE.

SIR,—Being desirous, as a supporter of Lord Palmerston's Government, to encourage industrial energy wherever it may require it, my attention has been drawn to Austrian speculations in mining, both for coal and other minerals. Fortified, therefore, with the catalogue of the Austrian Government, published during the great Exhibition of 1862, I have recently visited that important but, I regret to say, ill-managed and race-divided empire, in order to select such undertakings as appeared likely to be most satisfactory and fortunate in their results. What has most struck me, is the amazing variety of products the various sections of the kingdom are capable of, beginning at gold and silver, and ending with coal (both black and brown), and every item of mineral produce used in the ornamental and industrial arts. My first enquiries were, however, directed to the tenure of concessions, and their facility of transfer to foreigners, these being very essential elements in forming a judgment of the value of mining speculations, and their eligibility for the investments of my friend—"the British capitalist." It would be natural to expect that in a large empire like Austria, with its many races, its vast extent, and its depreciated financial condition, would be desirous of presenting every facility to the introduction of capital, and the facility of intercourse and access; what did I find, however, on my recent visit, fresh as I was from a perusal of Lord Palmerston's speech at the Southampton dinner, given to Baron Thier?

In the first place, I was stopped at Bodenbach, on the Austrian frontier, by some slight informality in my passport, and coolly told I must wait there four hours, or go back to Dresden for a *visé* by the Austrian Consul at that city. This looked awkward, and would have cost me the delay of a day or two, had I not had a friend with me whose passport was in order, who, interceding on my behalf, convinced the Dogberries of the Austrian police that I was not a Frenchman, as they supposed, but an Englishman, and finally induced them to consent to my proceeding, on condition that I should lose no time in reporting myself at Prague to the chief of the police, who would permit me to remain if he was satisfied with my explanation. This seemed to me a pretty fair beginning to an Englishman desirous of advising his friends to embark in Austrian mines, and caused me to ask would our friend, Louis Napoleon, on the other side of the Channel, have treated me in a similar manner, had I been desirous of investing in La Belle France? However, once arrived at Prague, I commenced my enquiries with reference to the mines, and, to my surprise, I found the majority of the coal ground occupied by small, insignificant holders—mere men of straw, who it is probable, if they lived to the age of Methuselah, would never be in the position to work them; in fact, owing their rights of mining entirely to the position of Austrian laws, which give to anyone claiming them the right to absorb large tracts of coal, to the rejection of the man of wealth and position, unless he chose to accede to the exorbitant demands for concessions, which, in reality, had cost their owners the merest bagatelle, and in which in fact they had done so little as to convince anyone that the owner was merely in the position of a fortunate gambler, or had, in gaining these concessions, merely drawn a successful ticket at a lottery.

GERMANICUS.

STAMP DUTY ON TRANSFER OF SHARES.

SIR,—If no consideration money be stated in the transfer, and if the mine be a cost-book mine, then a 6*d.* stamp is sufficient. If the mine be not a cost-book mine, then the amount of purchase-money, if any, should be stated in the transfer, otherwise the stamp must be that known to lawyers as a "duty not otherwise charged," which can be found by looking at the Stamp Act, referred to in my last letter on this subject. My opinion is, that a cost-book company, not being a scrip company, its share certificates need not bear the 1*d.* stamp.

T. T.

STAMP DUTY ON TRANSFER OF SHARES.

SIR,—In reply to a question put by "A Purser," in last week's Journal, we beg to state that if no consideration is mentioned in the transfer of shares in a limited liability company, the stamp on such transfer must be 1*l.* 15*s.*; a mere notice to register shares in a limited company will not suffice. If the company is on the Cost-book System, a 6*d.* stamp on the notice will be correct.—*London, Jan. 2.* H. S., AND H.

MINES, MINING, AND MINERS OF THE UNITED KINGDOM.

SIR,—But for a nervous dislike to public speaking generally, I should have risen on Wednesday evening to express the pleasure I had felt in listening to Mr. Hunt's valuable and interesting paper on the "Mines and Minerals of the United Kingdom," and also to take part in the discussion that followed, if only to remove one or two impressions from the minds of the speakers, which I am sure it was never Mr. Hunt's intention to convey. Will you permit me, therefore, to offer a few remarks through the Journal? The objects of Mr. Hunt's paper, or some of them, were to show the vast mineral resources of this country; to impress upon the mining community the necessity for improved education; and that "mining, commenced with proper judgment, legitimately carried onward, guided by the advice of experienced miners, and directed by honest intentions, is as satisfactory a speculation as any in which a capitalist can engage." He also gave a short sketch of the manufacture of fraudulent companies, which do so much injury to mining.

In all this Mr. Hunt has shown us, and not for the first time, that genius can throw a halo of interest around the dullest subject; but, as in some pictures, minor tints or shades are introduced, which, from particular causes, may leave a more lasting impression on the mind than the main subject of the picture itself—so the dark shadow of Mr. Hunt's paper appeared to me as though it produced more effect upon subsequent speakers than he intended that it should. And I would observe in the first place, as a public journalist for the last 25 years, engaged in supporting legitimate mining, and in exposing and condemning those bubble companies described by Mr. Hunt, that although the general truthfulness of his description of such companies must be acknowledged, experience shows that they are not by any means confined to mining pursuits, and bear, indeed, a small proportion to the number which have been promoted in banking, in railways, and other commercial undertakings; and while the very speculative character of mining offers more than usual facilities to designing adventurers, Mr. Hunt might as well have called the late British Bank a specimen of English banking, as the bubble company he described an illustration of British mining in its integrity, and as pursued on a large scale throughout the United Kingdom.

In the next place, Mr. Hunt remarked upon the fact that about 350,000 persons were employed in the production of minerals of the value of thirty-five millions per annum, which gives, as he said, "the production of each miner not more than about 2*l.* per week each; an amount so small, that he could hardly conceive it possible that it would remunerate the large capital which was invested in these mines." I confess I am at a loss to understand this sort of reasoning upon the subject, or to find out by what means Mr. Hunt arrives at his conclusions.

If a farmer takes 1000 acres of land to cultivate, he must spend, even in such a certain pursuit, a capital of 10,000*l.* before he can get a return for his outlay; and in mines, where there is great uncertainty and delay, it sometimes happens that 50,000*l.*, or 100,000*l.*, have to be expended before remunerative returns can be made. During the last 15 years, the profits paid by mines in Cornwall and Devon amount to 4,529,284*l.* 12*s.*, and the average number of profitable or dividend mines per annum during that period has been about 43. Many young mines, employing a large number of hands, have not yet made any returns whatever, and are entirely carried on by the capital of shareholders. A still greater number make returns trifling in proportion to their cost of working; but out of these classes of progressive mines a few every year become profitable, and by this sort of legitimate speculation the mineral returns, so important to the arts, science, and commerce of the country, are kept up; and I do not see in any way how sound calculations can be formed on the basis of Mr. Hunt's remarks. Out of the 350,000 persons employed, a very large proportion consists of girls and children, whose pay is about 10*d.* per day, and the average amount received by the whole 350,000 will not be more than 12*s.* per week each.

Mr. Hunt referred to, and indeed the Journal has given very copious extracts from, the Mineral Statistics that he publishes annually, and I hope he will pardon me for suggesting that they should be published earlier in the year. The returns of 1861 appeared in November of the present year, and much of their very great value, as works of reference, is thus lost. I mention this because I am told the fault rests not with Mr. Hunt, but with the "Circumlocution Office."

Twenty-one years ago, in 1841, when mining statistics were as difficult to obtain as agricultural statistics are at the present day, I commenced a work, the first in modern times, to call public attention to the mineral resources of this country, and it occupied me two years to collect the statistics required for it. But afterwards the task became comparatively easy, and for many years past I have been able to publish the annual re-

turns of the principal metallic mines the first week in January; and the publication of the returns of our collieries, &c., not more than a month later, would be an invaluable boon. I could have wished, also, that Mr. Hunt had given us his own idea of the formation of mineral veins, and that he had stated that no reference was made in his paper to electricity. It is well known that all our large deposits of mineral are found in the vicinity of, or in contact with, cross-courses, or veins of clay, elvan, &c., running in a different direction to the mineral veins, and without such interruptions to the general strata a mine is considered of little value; and one theory in reference to this is, that these cross-courses interrupt the current of electricity passing through metallic veins, and the minerals held in solution are thus condensed, and form large bodies of ore. While on the subject of electricity, I would add that to its agency, also, it is supposed "dowsing," or using the "divining rod"—the existence of which, Mr. Rawlinson says, "is a serious question upon the age"—owes its powers. I am not a believer in the art myself, but some years ago I went on a "dowsing" expedition with a friend in Cornwall, accompanied by a professor and firm believer in it, and a description of the process may not be uninteresting. The "dowsing" or "divining" rod is a hazel twig, with two branches like the prongs of a fork. The "dower" grasps one of the prongs in each hand as firmly as he can, presses his elbows close to his sides, and by a movement of the wrist turns upwards that part of the rod which would be represented by the fork handle. This position is a most constrained one both for nerve and muscle; and in it, myself, friend, and dower marched like skulmishers across several fields where lodes were known to crop nearly to the surface, without any result except to the professor, whose upraised portion of the rod dropped down once or twice with a sudden jerk, and each time, as the "dower" declared, when he passed over the back of a mineral vein; and the only explanation I could get was suggested by my friend, that some persons were particularly susceptible of electrical influences; and that in the very constrained position they placed themselves in when "dowsing," their nervous systems were affected by the electric currents in the mineral veins passed over, and the power to sustain the rod in its upright position lost. At any rate, as many persons who have heard of this "divining rod," may never have heard the name of using it explained, I describe it just as it took place—even at the risk of being told that "it is a reflection upon the age we live in."

In conclusion, I would add, in reference to mining speculations and Prof. Tennant's remarks, that, from the fact of my having published, in addition to other works, a Review of the Progress of Mining, every year for the last 19 years, I have, perhaps, been consulted in these matters as much, or perhaps more, than any other person in London, and my advice has been:—1. Never speculate at all, unless with money you can afford to lose.—2. Never embark in any mine whatever, and particularly such as are offered through the means of prospectuses, in large numbers of shares, without obtaining the honest advice of a practical, disinterested agent in the district where the mine is said to be, and this can always be had for a fee of 2l. 2s.—3. In embarking, even in profitable mines, never confine yourself to one, but, on the principle of insuring ships at Lloyd's, diversify your risk into five or six sound undertakings, and, in the aggregate, success will attend you.

Were these rules adhered to, we should have few bubble companies to complain of and mining would take the rank that its importance demands.

St. Michael's-alley, Cornwall. J. YELLOU WATSON, F.G.S.
P.S.—Much has been said, also, about the ignorance prevailing in the mining districts; but, having passed many years of my life in agricultural districts, and observed the gross ignorance of the labouring classes generally, my intercourse with Cornish miners has impressed me with a much higher opinion both of their intellects and acquirements. They are infinitely above the average of working men, while the occupation in which they are engaged from childhood renders them acute, shrewd, and intelligent. Of Cornish agents, doubtless, it may be said that more scientific knowledge might be advantageously acquired by many; but, as a class, they are to be highly intelligent and practical men; and that they are generally considered so is evidenced by the manner in which their services are sought, and highly paid for, in every quarter of the globe where mining operations are carried on.

[The substance of this letter has been communicated to the Journal of the Society of Arts, of which society Mr. J. Y. Watson is a member.]

MINES, MINERS, AND MINERALS OF THE UNITED KINGDOM.

SIR.—Mr. Hunt, in his paper on the above subject, speaks of the Cornish miner as superstitious, slow of thought, not willing to communicate, serious, disliking joking, sober at feasts and fairs; and, if removed from home, ignorant, but rarely honest enough to own it; as not having any better knowledge of mining than our forefathers, and that for want of a better scientific education to know how the veins are formed, &c. And Prof. Tennant also condemns their barbarous ignorance, in not knowing iron pyrites from copper pyrites, because they call both mundic (?).

Now, Sir, as being a Cornish miner, from Illogan, connected with the Redruth and Camborne mining districts, I beg a small space in your valuable Journal for a few remarks. When I left Cornwall, more than twenty years ago, the miners were not of that dull, slow, reserved character which Mr. Hunt speaks of. Should he see them descending underground in large parties, he might hear most of them singing in good style,—yes, the most religious are generally cheerful. Again, see them when exposed to danger, as they often are. Could he witness the quickness of thought and the cheerfulness with which they proceed to avert further danger, he would not think they were slow or dull. Again, see those who do not pretend to be religious, at the fair or market, in the time of their jollity, as I often have. You see the smiling face and sparkling eye, which denote activity. Again, as "A Working Miner" says, of the testing of the ore by the flame of a candle; yes, and they often apply this test to the water dripping from the roof of the levels, by which means good discoveries have been made, which our scientific men would never have thought of. There is no doubt but many Cornish miners, when removed from home, feel closely attached to the Cornish system in everything. I remember, some years ago, a Cornishman coming to the North of England as an ore dresser. When he came I was laying out dressing-floors, putting in grates, &c. He said, "This is not the way we dress ore at home; this will never do." But when it was tried, he was honest enough to own that he was wrong. We can dress more ore with the grate for 1s. than with the griddle for 2s. 6d., and most Cornish miners, when they see a better system than their own, are not slow to act on it, as you may find by Capt. Carthew, of St. Just, when he stated at the meeting the other day that he was dressing the tin for something like half the cost of their neighbours. Such instances of improvement I think of greater benefit to the mining community than if we could explain the exact method of charging the vein with the ore being dressed.

My predecessor, educated in one of the first mining schools in Europe, and a thoroughly scientific man, was for years studying a better system of mining and dressing the ore from Tyndrum Mine; and after awhile he brought it to perfection, with angle-troughs, grates, self-acting buddles (or trays, as Mr. Bettess calls them), a description of which you published in the Journal. And I think everyone who knew that gentleman will admit that he did everything he could to promote mining; but when I succeeded him, two or three years ago, I was obliged to change his system, both underground and at surface, which made a saving of 20 per cent. underground, and over 90 per cent. in the dressing. Now we can dress the stamps ore for one-fourth the price at which it could be done in Cornwall 20 years ago. We can buddle with our self-acting buddles, without any kind of machinery, more than 20 tons of slimes in a day, with one boy, and the separation much better effected than by tramping.

Now, a word to Prof. Tennant; I never knew a Cornish miner, *barbarous as he is*, call yellow ore (copper pyrites) mundic; but I well remember a professor coming here who called iron pyrites copper, and told me to tell the Marquis of Breadalbane that it was 25 per cent. of copper, when it was over 50 per cent. of sulphur; he also wanted us to get bags or boxes to save some decomposed iron pyrites in, as he said it was rich copper ore. I have seen a good many of such scientific men during the last fifteen years, and when they are making their reports on the mines there is scarcely one of them who knows anything about the price for cutting the ground or dressing the ore, but many of them would like to know the value of the ore, and I think it of the greatest importance to the miner to study well the locality he is in—to know all the different heaves and slides of the vein—as well as the changes in the rock where the vein is rich or poor; also the different bearings of the joints in the rock, as these have often much to do with the character of the vein, and great helps to get at the productive parts of the vein, so that the miner may not always have to burrow through the rock without any more guidance than the mole.

Manager of the late Marquis of Breadalbane's Mines.
Tomnadashan, Kenmore, N.B., Dec. 26.

MINES, MINING, AND MINERS OF THE UNITED KINGDOM.

SIR.—The above was the subject of an interesting paper, read before the Society of Arts on Dec. 17, by Mr. Robert Hunt, F.R.S., Keeper of Mining Records, at the Royal School of Mines. I have always noticed with pleasure the high interest taken by this gentleman in all that concerns the prosperity of British Mining, but especially his great zeal in behalf of the poor uneducated Cornish miner.

The mines of our country enable us to wield a power more than equal to all the standing armies in the world, and, therefore, give us the first rank amongst the nations, consequently the more extensive is our knowledge the more erudite are we in all things pertaining to their successful development, and the better able shall we be to perform our mission as pioneers of the world.

That our mining communities are still wrapt up in the misty, cloudy atmosphere of ignorance is beyond controversy. Miners are told, from their very childhood are trained to observation; yet their powers of observation are of a very limited order. Their experience is made up of a knowledge of peculiarities existing within a confined area. But who can wonder at this? Speaking generally, we have not the means to educate our children, and if boys have to descend into our mines at the tender age of 7 to 10 years, shut out from the glorious sunshine, subjected to a life of toil and hardship, amidst the chilling damps and cloudy atmosphere natural to mines, is it to be wondered at that they grow up with stunted intellects, and that their manhood is a period of darkness and ignorance? I have been told during some of my rambles in the east and north of this island that the Cornish people were in a state of semi-barbarism, and I was once asked how far Cornwall was from England! And whenever a professor, or some less bright luminary, condescends to write or lecture on the subject now under consideration, Cornish miners, especially, come in for the best share of praise. That we are really so low in the scale of humanity, or more ignorant than other communities, admit of dispute. But what has been done to remove the seemingly settled darkness that has so long obscured our mental vision? What kind of machinery has been set in motion to plough up the fallow ground, and prepare it to receive the seeds of knowledge? Is the fashionable teaching of the day calculated to nourish and quicken the germ that is within us? Is the instruction submitted to us of the right kind or degree; does it remove the difficulties which beset our path, or lead to the solution of these problems, at present wrapt in mystery, but which when revealed will enable us to take an excursion down, I believe, to the centre of gravity? We believe that all things in the heavens and in the earth are governed by fixed immutable laws, many of which have already developed themselves; but that such a glorious epoch in the history of Mining will ever dawn upon the world when all these may be demonstrated, all uncertainty removed, the great superstructure of the globe so dissected and thrown open that we may look into it as through a glass, is a doctrine we cannot in our ignorance entertain. Most miners have learnt to read the names of the different series of rocks forming the crust of the earth, and to know the relative position of each layer and group, from the granite up to the chalk. They have observed that every leaf of this great book appears to be divided and subdivided into sections, each of which shows some distinctive feature characteristic of the variety of metals and minerals found therein; have noticed the crystallisation of the rocks, the structure and strike of the beds, the direction of the lodes across the great cleavage planes, the influence brought to bear on these by the junctions of cross-courses, slides, bands of porphyry,

and trap dykes; that one vein may be found traversing a highly metalliferous rock, and yet be barren; while another, crossing the same country, cutting through the same insular beds (at a different angle), in behalf of riches. We have seen, too, the land marked reared up over our land by the agency of some great law, scooped as basins, guiding lodes in our pathway, and by the aid of which we have selected the spots, gone down into Mother Earth, and extracted the precious treasures concealed in her bosom.

Can anyone look at the range of granite from St. Ives Conisla to Bolehall without being struck with its peculiar surface outline, or fail to see the strong analogy it bears in that respect to the Canadian range? Who has passed through the Marazion district without noticing Carn Perran, Carn Venton, the great beacon at the back of the town referred to, not forgetting that splendid monument of the power that can lift the world—St. Michael's Mount? See how the vast deposits of metal have been found clustering around these great pillars of the district. Observe how nearly parallel are all the banches, how nearly all the lodes in this basin of slate, so to speak, are fed by great elvan-courses, which are evidently connecting links between the western and Cornish granite hills. Go into the Redruth district, and you immediately come to the conclusion that the great granite boss, Carn Brea, is the backbone of the neighbourhood. What a group of mines, all within an area of a few miles on either hand of the line forming the junction of the granite with the slate. Go where you may, the same analogy will be found to exist.

The districts I have referred to have yielded vast amounts of treasure, dug up by men who burrowed as does the mole, without any guiding light. If this be true, then "ignorance is bliss," "it is folly to be wise." When, and to whom, did our Professors point out where a profitable mine has been found? What have they said or written whereby the moles might burrow with such mighty results to the great human family? They have given a good general description of the country, but when did they attempt to particularise? When did our paid teachers attempt to explain why lodes so productive of tin in the slate, as at Great Wheal Vyne, become poor on entering the granite; and why was that rock reversed at Great Wheal Mine? What intimation had we that Dolcoath Mine would pass through such a transformation? Can they show the reason why the upper section of that mine should be so rich in copper, and the lower one so rich in tin, or which of the two deposits is the most recent? Did one section change from tin to copper, or the other from copper to tin? Why not attempt to explain such phenomena upon the evidences of inductive research? It is very probable that this interesting example of the diversity of Nature's laws will be followed by others in the same locality, if not in more distant ones. With the above before our eyes, inductive reasoning may assist in the solution of neighbouring problems, but we shall have to travel the road of enquiry unaided by the Professors. We admit our ignorance, our inability, to grapple with many of the difficulties that surround mining, but we see no chance of rescue at the hands of those who are paid to instruct us. The kind of instruction proffered at the present day is of too high degree to be beneficial to the working miner. You must first show him where the lode is, and then the bunch of ore, leaving the questions of physics and chemistry, in connection with filling matter of lodes, for after consideration. I consider the latter a purely scientific enquiry, and not of the least service in a commercial point of view.

Suppose the wind admitted of chemical analysis, to make the test, and be able to describe its elements, would be very interesting, but such an enquiry would not bring any increase of propelling power. Tell us how the rocks are formed, how the fracture are made, and the filling matter brought in and fixed, if you like; but tell us, please, where the treasure are—where profitable mines are to be found. Give us the true guiding light, and we will thank you. Why have you done this you will have crashed out that dark ignorance which spreads over all like a fungus, and have planted in its place some of the seeds of the tree of knowledge.

Minsterley, Salop, Dec. 30.

MINES, MINING, AND MINERS, OF THE UNITED KINGDOM.

SIR.—It is sometimes amusing to witness learned ignorance in high places. In what age or country did the miners live whom Mr. Hunt described so eloquently? Poor Professor Tennant, too, whose fame as a mineralogist had already reached below par in the Cornish ear, must again be compelled to open his mouth in the endeavour to charge others with his own ignorance. Never was there such an unlucky random shot as that poisoned barb—poisoned, indeed, but only to wound and communicate its virus to the hand that dealt it—"That Cornishmen are too ignorant to distinguish iron pyrites from copper pyrites, because they call both mundic." The Professor is ignorant of the fact that most of the copper ore sold at the Cornish Tackles is of the variety called copper pyrites, and he knows nothing of the fact that the Cornish miners do not know the difference between the two minerals, who thought he should have like his master, but in the endeavour cut his own throat.

Mr. Hunt referred to the evidence given by Mr. John Taylor, before a Committee of the House of Commons—"That there are no greater facilities for ascertaining the productive character of a mine now than formerly. Our knowledge is not greater than that of our forefathers. The difference is in improved machinery." But this, so far from proving that "the science of mining can scarcely be said to have an existence," on the contrary, proves that it not only does exist, but that it existed previous to the birth of the House of Commons. If our knowledge is not greater than that of our forefathers, it follows that our forefathers were good miners as ourselves; consequently, that the science of mining existed before us; and every miner knows that in reality this is the case. The old miner has certainly not been excelled by the modern, either in finding the mineral or in dressing it, only in greater dispatch, leading to larger quantities being returned.

Mr. Hunt may say all our knowledge is empirical, but we believe it is a knowledge which leads us aright, nevertheless. He may say there is an entire absence of any method by which a knowledge may be obtained of the causes; but will he tell us that the miners' province is to spend his time in tracing out remote causes (by inductive research), when other philosophers have not yet reached? Or is it not rather the miners' particular province to follow the lead of the phenomena before him, and by deductive research endeavour to understand the chances he has of bringing mineral into the market in paying quantities? Much of the ignorance with which the miner is charged really belongs to the learned professors themselves. Let them go underground, and they will, after overcoming their own awkwardness, and that nervous dread of something unseen which is the real cause of their generally coming up as ignorant as they went down, begin to learn something of the wonderful operations in the grand laboratory of Nature, of which they now, in their learned ignorance, talk only to expose themselves to the ridicule of the man who wins his crust from the dark depths of the earth. No man can understand the just description of underground phenomena without some direct acquaintance with such things; and one or two visits underground are not sufficient to clear away the mists of prejudice which have been accumulating for so many years over the minds of those professors who generally talk most on the subject. That was a happy thought of Prof. Morris which caused the expression in one of his lectures of a great truth in simple language, when he said "the less a man knew of a subject the better he could often talk about it." Happy ignorance which enables its votaries to indulge in rhapsodies of eloquence, charging want of knowledge upon those who are in reality their only teachers, but of whose teachings they can never realise the full advantage until they become sufficiently earnest to endure the labour necessary in acquiring that knowledge of the alphabet by which alone may be read the great book of Nature, many pages of which are now open to the more determined searchers after truth, whom they malign.

Mr. Evan Hopkins's mainly letter last week did much to counteract some of the ill effects of Mr. Hunt's ill-considered remarks; but it is not a pity that such a clever man as Mr. Hunt should possess, and promulgate with all his well-known eloquence, such ridiculous notions? Suppose a case that one single Cornish miner was really such an ass as he has been depicted, would it be politic for a man who had the most remote desire of elevating or informing him, to first give him such an estimate of his capacity or acquirements? No, he would first endeavour to lead him on by easy steps, gradually into the grand archana of knowledge, until for himself he should discover his own ignorance. The fact of the great Professor coming direct from the Miners' Association, and delivering himself of such a rhapsody of misconception proves, not the obfuscation of the Cornish mind, but the blinding effect of adulation upon the well-balanced mind of the learned Professor.—*Redruth, Jan. 1.*

MINES, MINING, AND MINERS, OF THE UNITED KINGDOM.

SIR.—It has been said that "great discoveries, destined, like those of gunpowder, printing, and steam, in the end to change the face of the world, never came to maturity but by slow degrees;" but in the last half of a century some of those discoveries can scarcely be said to march towards perfection by "slow degrees." In almost every part of the civilised world, and especially in our own country, the most important changes have been made—changes as far removed from the apprehension of our fathers a century ago, as a visit to the moon is to us at the present day. In that period we have to a great extent changed our inland mode of transit for roads and passengers, and swept the stage-wagon and mail-coach off the road, and reduced the time employed in travelling from days to hours. We have seized the "forked lightning," and turned it into a postboy, and it carries our messages over the electric wires eastward, northward, and southward, at any distance we require, almost instantaneously; and it wants nothing but a continuation of wire road to become our swift letter-carrier to the ends of the earth, and to convey our thoughts through seas as well as on land around the world.

Our steam-ships now traverse the Atlantic, the Southern, the Indian, and the Pacific Oceans; America is brought within a few days of our shores; India, China, and Australia, once at the distance of many months or a year, are now within a few weeks voyage of our homes. The improvements in our domestic comforts are scarcely less marked—the tedious method of obtaining fire from the "under-box and steel" by the invention of the "infernal match," to the nobleman, now saved the annoyance of cutting his goosequill and the labour of closing his letters, by the introduction of the metallic pen and the envelope. The improvements in agriculture, and in our manufactures of raw material, have reduced the price of our food, and brought cheap clothing within the means of our labouring working classes, and supply them with the means of information in the form of newspapers, public libraries, literary institutes, reading-rooms, &c. In fact, almost every branch of industry has greatly changed even in this country, with the exception—*MINING*. After deducting the improvements in the steam-engine by Bolton and Watt, and the introduction of the stationary engine for stamping and winding, and the tubular boilers by Trevithick, at the time he invented the locomotive, and some subsequent improvements in tin dressing, mining is said to be at this day just where it was 200 years since. "The hoarded treasures are mined for by men who burrow, as does the mole, without any guiding light,"—so says Mr. R. Hunt, F.R.S. Now, Sir, I believe many men have been waiting, since the establishment of the Royal School of Mines for some theory or practice, like or some method, to issue from those learned gentlemen at the head of that department of the nation's wealth, to conduct mining on a more safe, economical, expeditious, and scientific plan, than has hitherto been pursued in this country. In a word, they want to know *how to open a good mine*—and when opened, they want to know the most economical method of draining it, ventilating it, winding the stuff, dressing the ores, and preparing them for the best market. Will any of those scientific men inform us, or, if they will not trust us with the secret, let them open a mine themselves—a MODEL MINE—and show us what they can do. Surely, if they possess the secret of divesting mining speculation of the serious risk of loss to which it is now subject, and will be to a great extent with our limited amount of knowledge, they ought for the benefit of mine adventurers, and for the good of the many thousands in this and other countries depending on the produce of mineral mines, either to work the mines themselves, or to divulge the great secret for the benefit of others.

It is a mere waste of time with those gentlemen to tell us we are ignorant, and will not receive their instruction, and make this assumed fact the sole reason for leaving us in the "dark ignorance" now hanging over us. Had other philosophers pursued the same course, what had been our present position as a nation? Had the Stephensons and Brunells waited until they overcame all the ignorant prejudices of the English wagon-drivers, coach-drivers, coach-guards, postboys, mail-carriers, and others, before they laid down our iron roads, and put the electric telegraph into operation, what had been our state at the present moment? Until all the "fears" of the old school had consented to change the "roll" of his old sailing man-of-war for the motion of the

steam-ship, and the fresh breeze that braced him on the "tops" for the smoke and steam of the funnel, where would the "iron walls" of old England be at this day? Or, had the nation stayed until the old "sails" of Nelson's school could be convinced that there was any better cannon than the old smooth-bore, or any better method of attack than to run his ship close up to an enemy, and fire his double or treble-shotted guns right into him, before the rifled cannon and Armstrong's or Whitworth's guns had been used, what would the country think of them? Gentlemen, I entreat you to send us, not merely some "seeds from the tree of knowledge," as Mr. Hunt wishes to do; but send us a branch from the tree itself, blooming in full vigour and beauty, scattering rays of knowledge on every side; then shall the tops of your hills be enlightened, and light shall increase until it has spread into the lowest valleys, and that darkness which (as the Professor says) has hung over us "like a fungus" place, I presume, the days of the Druids, shall depart before the rays of the sun of this new mining science, like the darkness of our Cornish nights is scattered before the rays of the morning sun. In the name of the mining interest of this country, I ask the favour of your giving us a practical illustration of your superior mining in some part of this country or the next. We can find lodes, we can open mines, but we cannot tell where to find a mine that will involve no risk of loss, and that will be sure to leave the adventurers a profit on the required outlay.

We are, also, very much in the dark about the method of making worlds and forming mineral veins, and perhaps do not attach so much importance to these profound subjects as Mr. Hunt and his friends think we ought to do. But I must protest against the statement of Mr. Hunt, that "we borrow as does the mole, without any guiding light." We have our guiding light, and until Mr. Hunt or his friends send us a better one, we shall follow it. We do not think that a knowledge of geometry, mechanics, algebra, and chemistry, is all that is necessary, though useful to some extent, to conduct our mining operations; but we know a little of those sciences, and so did our fathers long before those modern lights were thought of. We also have as a "guiding light" the bearing of the lode, its composition, its width or size, the surrounding strata, or igneous rock or granite, as it may be. We also see, or imagine we see, two kinds of granite, one more congenial to the production of tin and copper than the other,—this may be thought by some a very foolish idea. We also notice the presence or non-presence of elvan or porphyry dykes, and such things as cross-courses; we think, also, that some kinds of strata are more congenial to the production of one kind of mineral than another. Now, I am not quite sure that a "mole" notices all these things; but I assure Mr. Hunt we shall be very thankful for any information he can send us; or, when he is in the country, for any instruction he can give us to enable us to attain that knowledge of mining which we consider of the greatest importance.—1. Where to find a good mine.—2. When found, the best method of raising the ore at the least possible expense, consistent with the health of the miner, and when raised to surface, the best possible process to prepare it for the market.—3. If we are raising any substance of marketable value, and throwing it away as rubbish, to inform us how to preserve it. Any information on these subjects will increase the obligation we owe that gentleman for the valuable Mining Records already preserved. And if Mr. Hunt can find any kind of religion that will benefit our miners more than "the religion of the heart," we shall be thankful for some further information on the subject.

In the discussion which followed Mr. Hunt's lecture, Prof. Tennant is said to have made the following remark—"That Cornishmen were too ignorant to distinguish iron pyrites from copper pyrites, because they call both mundic." If this remark had been made by any other gentleman in the meeting it would have taken me, at least, by surprise; but coming from a learned Professor, whose duty it is to teach our branch of mining knowledge, I am not in the least disappointed, but take it to be a fair specimen of Mr. Tennant's knowledge of Cornish men and Cornish mining, and have no doubt but by persevering efforts he will soon succeed in making his class as wise as himself. I hope Mr. Tennant will pardon me, if I assure him that not only our miners, but hundreds of our mine girls, know the different kinds of ore raised in this country as well as he does; and I will engage any day, if he will come to prove it, to get hundreds of men and mine girls who know the value of ores raised from the mine better than he does. I have never known a child of a dozen years old, after working on our mines a few weeks, so ignorant as Mr. Tennant makes our men to be; the nearest approach to it that I have heard of, was a London Professor, who was sent down to inspect some mineral ground, and who mistook a stained rock for carbonate of copper.

Pool, Cornwall, Dec. 29. JOHN TOSKIN.

THE MERIONETHSHIRE GOLD FIELDS, AND MR. ROBERT HUNT, F.R.S.

SIR.—Is it quite fair on the part of Mr. Hunt, whilst "recommending caution," to condemn, and pronounce a failure, the exertions of practical men to ascertain the real value of the gold-bearing rocks of North Wales? It is certain they have not been half tested, and cannot be for some time; and equally so, that in the opinion of several gentlemen who have gained great experience in foreign gold fields, they possess characteristics deserving attention. The public have only to avoid supporting would-be Professors, who do not understand the "science of gold mining, or treatment of the ores." Thanks to Mr. Evan Hopkins for his observations in last week's Journal on Mr. Hunt's remarks "On the Science of Mining," &c.

ONE WHO HAS BEEN IN A FOREIGN GOLD FIELD.

GOLD MINING—TREATMENT OF QUARTZ.

SIR.—A correspondent addresses you in last week's Journal under this head. His remarks, however well intended, will probably be passed un-noticed by those who are practically acquainted with, and had experience on, the subject. I wish the friend he refers to and himself every success in the practical application of what they believe to be improvements in effecting the amalgamation of gold with mercury; and I hope, without delay (as there is abundance of quartz to be had), they will themselves give "their system" a good trial on a large scale with various ores, and then put a price on the amalgam they have obtained. As to the action of stamps, and their capability to crush the ore to the necessary fineness, your correspondent is entirely in error, and also assuming that a uniform system of treatment must be applied to gold ore. The treatment of the various classes of gold ore, whether English, Welsh, Irish, or foreign, in a mode to produce advantageous commercial results, is a subject of great interest and national importance. It is one very little understood by the general public, who cannot be too much on their guard, as assuredly there are very few persons in England who have seen any bulk of gold quartz *in situ*, and had any lengthened experience of its treatment. It appears to be the interest and duty of those who have a bona fide property in auriferous rocks, as owners or shareholders in mining companies, to point out and protest against all fallacies in the treatment thereof, and the injuries done to "legitimate" enterprise in a sound and growing business, by the assumptions of aspiring patentists, machinists, Professors, &c., who not only can themselves learn, but also teach the public, in a few fleeting hours what has required a lengthened period and great expense and labour for experienced men to acquire.

THE LISKEARD MINING DISTRICT.

SIR.—Having made a tour through the Liskeard mines during the present week, I beg to hand you a few remarks on the mines for the information of your readers.

A MINER.

WHEAL CARADON.—The engine, which is a new 50-in. cylinder, is now being erected; the bob, cylinder, and some other parts are fixed, and it will probably be got to work in four or five weeks from this time. The pitwork is in order in order to be attached to the engine as soon as things are in order. The engine-shaft has been sunk about 5 fms. below the 50, by means of a small rotary engine. The lode is about 2 ft. wide, and producing fine rocks of ore. The 50 east has been driven about 20 fathoms; the lode is large, with stones of ore. The 50 west has been extended about the same distance; the lode is about 2½ ft. wide, producing some good copper ores; this level has laid open some good ore ground, which speaks well for a deeper point. There are other lodes which have been laid open in the backs, but little has been done on them. A fine elvan course runs through the level, and from present prospects bids fair when developed to lay open a good mine. The management is entrusted to Mr. Pryor.

CARADON VALE.—A new engine has been erected, and set to work, and they are sinking the engine-shaft. This mine is in a direct line with East Caradon.

EAST CARADON is a good mine, and likely to continue in the Dividend List for many years to come.

SOUTH CARADON is said to be looking remarkably well.

WEST CARADON is rather poor at present, but it is thought better days are dawdling. They have several points to come off in driving their cross-cuts, from which good results are anticipated, and at the bottom of the mine they had a good quantity of ore in the 140, but it will take some little time to bring the levels under the ore ground. This mine has paid about 40,000l. since Mr. Pryor has held the management, and I should presume that at no distant period it will again pay regular dividends.

WHEAL AGAR.—A 24-in. cylinder engine is being erected, which will be got to work in about one month. Some splendid stones of ore have been raised from the engine lode, and it is thought that this mine will rank among one of the prizes of 1863. The mine is under the superintendence of Mr. Pryor.

PHENIX is raising large quantities of ore, but it is said that they have not had very many discoveries since the present company have had the mine. It is stated the mine is well conducted.

WHEAL NORRIS has so far turned out a blank, but it is thought, from the look of the backs of the lode, good results may be anticipated.

MARK VALLEY.—I should suppose, from the report of a "Liskeard Inspector" in last week's Journal, that the mine is a good and lasting one, but in winding up his report, he appears to come out pretty strong in condemning the system of management. Now, with respect to stoping, if he has ever visited the Camborne and Redruth districts, he will find the best mines in that locality carried on under the stoping system, but it has been stated to me that a certain clique at Liskeard are rather at enmity with the manager. I never hear one word by the tradesmen of that town against the thousands sent in the month by him. Had it not been for such persons as the manager of Marke Valley to get the money from strangers to work the mines, many of the Liskeard tradesmen would soon have to turn their pale faces to the wall.

EAST BRONFLOYD MINE, AND BETTING MEN.

SIR.—Not 100 miles from East Bronfloyd there is a mining establishment that for several years has been selling more than enough of ore to pay its cost, yet, instead of dividends, the shareholders have been so pestered with calls that a great many of the best speculators, after having the state of their pockets reduced to the proper level, have had to skedaddle in disgust, while the manager performed the pantomime over their departure of a Hookey to his worthy underground agent. If a man is born in a stable it is not necessary that he should be a horse, but it so happens that agents, having been originally in the stable, and recently engrafted upon a mining stock, may be presumed to know more of horse ivory than of lead ore; and, like the jockey race in general of the human family, are exceedingly fond of betting, and evince a desire, on every opportunity, of settling everything by the law of odds. With these proclivities there is no doubt that if such an agent looked into a horse's mouth to get the money from strangers to work the mines, many of the Liskeard tradesmen would soon have to turn their pale faces to the wall, either in the lode, or in or out of the shareholders' pockets; it is so more than could have

been expected. If a mine prove a good one, and you want to get your copartners' shares into your own hands, it is necessary to make calls, without distorting the prospects highly. If you want to keep the shareholders paying calls in a poor mine, you must, of course, cry up the lodes, ends, and shafts accordingly. I knew a mine once, which had a furnace in it, in which a celebrated manager was engaged, according to the reports, in casting in a certain quantity of quartz, containing, per sample, so many hundred ounces of gold, in a week. Well, I cannot tell how many thousands of ounces of gold were deposited in this refining pot, but, at last, like the mountain in labour, for everything must have an end, the reservoir to receive this enormous lake of gold was formed, when, *mirabile dictu*, in consequence with its classic original, it brought forth its ridiculous mouse, in the shape of, I believe, $\frac{1}{4}$ oz. of gold. In this case the shareholders remained entranced to witness the end of the splendid catastrophe, but I have not heard if they were much delighted with the result. If people, for a certain purpose, will disgust and get rid of their hands in shareholders, it is not surprising that they occasionally should try their hands in distorting the shareholders of other concerns, and, possibly, in trying to get these concerns for themselves altogether from the un lucky rights of holders, upon the aforesaid principle. In furtherance of such an issue, I see what has been offered as to our East Iron-ore Mine. Now, so far as I am concerned, I would advise my copartners to have nothing to do with these gifted gentlemen and their bet—for one reason, that I do not like betting as an ordeal of settling differences; for another, I do not elect to go to law with a man who incites you to the trial, having first taken the precaution to name the jury. If I were going to call in some person to decide upon the value of a course of ore in the neighbourhood of East Iron-ore, I should like somebody to judge who differed from his own conscience, such, for instance, as Mr. Jonathan Pell or Captain Tregorian, for in some places a sort of Imperialism reigns, where, in order to get the proper amount of subservience, it is necessary to sacrifice a certain quantity of ability; and if people in such places were to speak of their neighbouring mines as justice requires, it might subject them to what the French journals sometimes have to submit to when speaking too favourably of England—an advertisement. A SHAREHOLDER.

PLANTATION COMPANY OF WESTERN HINDUSTAN.

Sir—Would you do me the justice to insert the following in your next Journal, I reply to Mr. Lee Stevens' letter of the 20th inst., accusing me of a want of courtesy in not answering his letters to my address. From the fact of the information he sought having been inserted in all the daily papers twice previous to the receipt of his letter of the 6th inst., I naturally concluded that he either doubted the fact of the Plantation Company of Western Hindustan having been launched independently, or that he felt dissatisfied to make a simple calculation from the advertisements, which would have given the desired result. As I was very busy on the receipt of his first letter, I requested the messenger to state that I would be glad to see Mr. Stevens, or he could, if he chose, call upon the brokers, who would give him every information. Mr. Lee Stevens' second letter, I conceive, needed no reply, as that gentleman must be answerable for the acts of his own servants for the non-delivery of a message. H. S. RANSON, Sec. Cornhill, Dec. 31.

Meetings of Mining Companies.

GREAT WHEEL BUSY MINING COMPANY.

A general meeting of proprietors was held at the company's offices, Austinfriars, on Thursday, Dec. 31, at 10 o'clock, Mr. E. Mathew in the chair. Mr. E. KING (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed. A statement of accounts for the three months ending October was submitted, from which the following is condensed:—

Balance last audit	£3500 17 9
Aug. mine cost, merchants' bills, &c.	3600 2 10
Sept. ditto	3659 8 3
Oct. ditto	3611 0 6 = £14,371 9 4
Calls received	£3000 0 0
Copper ore sold	4317 15 0
Tin ditto	3283 6 2
Arsenic	5 12 6
Lead ore	4 5 7 = 10,610 19 3

Leaving debit balance, £ 8,760 10 1

The report of the agents was read, as follows:—

Dec. 31.—Since the last general meeting we have sunk Harvey's engine-shaft to the 130, and have opened east and west of the same, on the course of the lode, about 9 feet each way; the lode in the east end has averaged about 6 ft. wide, worth full 40l. per fm.; this we consider a very promising feature, being at the lowest point in the mine. The lode in the west end, at this level is at present small and unproductive; as soon as we get under Fielding's shaft we pursue the same, and when communicated with the 120 (which we calculate will take a month or six weeks) will enable us to commence sinking the engine-shaft below the 130. Fielding's shaft is sunk 5 fms. 2 ft. below the 120; the lode is small and unproductive. Offord's shaft is sunk 6 fathoms below the 120; the lode in the last 6 feet sinking has been about 2 feet wide, producing good stones of tin, and is of a promising character. The 120 is extended east of Offord's shaft 25 fms.; the lode has varied in size from 2 to 3 ft. wide, at times producing a little tin and copper ore, but not to value. This end is now within 8 fms. of Carbin's winze, which is sunk 6 fms. below the 110; the lode is 2 ft. wide, worth 30l. per fm. tin, and is now suspended, in consequence of an increase of water; we hope to be able to resume sinking this winze shortly, as the water is flowing more freely from the 120. The 110 is extended 3½ fms. east from Livett's winze; the part of the lode which we have driven on for the last 10 fms. has proved very small, of little value, and continues so to the present. Looking at this change from the 100, where the lode is very large and productive, we are led to believe that the main part of the lode is still standing south, and are putting out a cross-cut in that direction to prove it; it is extended about 2 fms., but still in the level, without the appearance of the lode; should it not prove to our expectations, we intend driving north also. Ham's winze is sunk 2 fms. 6 ft. below the 110; the lode averages about 9 ft. wide, and is worth from 60l. to 70l. per fm.; this winze about 7 fathoms east of the 110. We commenced to sink Mathew's shaft below the 100 some short time since, but were obliged to suspend it, in consequence of the surface water; we hope soon to resume it, as it appears to be one of the most important points in the mine. The 100 is extended 6½ fms. east of Mathew's shaft; in the first 3 fms. of this driving the lode was only worth from 3l. to 6l. per fm.; since that time it has gradually improved, and is now worth quite 8l. per fm. In the 100, driving west from Fielding's shaft, the lode is small and unproductive. The lode in Bowden's winze, sinking below the 90, east of Mathew's, is large, worth 10l. per fm. in tin. The 90 is extended east of Mathew's shaft 26 fathoms; the lode is about 5 ft. wide, containing spots of tin. The 70 cross-cut in now extended 91 fms. north of Kite's shaft, but has not yet discovered the lode; in the past week there has been an increase of water, and some branches of quartz intersected, containing good spots of copper ore; this shows that we are nearing the lode, and we consider it a favourable indication, the stratum being a light clay-slate or kilaas, congenial for producing copper ore. The 50 is driven west of Black Dog shaft 17 fms.; the lode is very large, composed of capel, fluor-spar, and spots of copper ore.—Boscawen's Mine: We have extended the 70 about 6 fms. west; in the first 2 fms. of this driving the lode was 2 ft. wide, containing stones of ore only; after this it began to improve, and became worth in the bottom of the end 30l. per fm., but at present is only producing stones of copper ore. We have suspended this end until we communicate Kite's shaft, against which we are rising from the back of this level about 4 fms. behind the end; we have risen 6 fms., and expect to hole in the course of next week, which will be of great advantage to us for ventilation and discharging of stuff, being now obliged to draw it through the engine-shaft by a tackle to the 60, which is very slow and expensive. Kite's shaft is sunk 5 fms. 3 ft. below the 60; the lode is 1 ft. wide, composed of friable quartz and stones of ore, but not to value; the lode is much the same in size and character in the rise referred to above. Hunter's flat-roof shaft is sunk 7 fms. below the 60; the lode has been small, and the ground not so good as expected for the first 4 fms.; since then the ground has improved, and if it continues as at present, it will reach the 70 in six or eight weeks from this time. The depth from the 60 to the 70, on the course of the lode, will be about 15 fms. It will be remembered that at our last meeting we expected on sinking this shaft it would in all probability drain the bunch of ore driven through and sunk on about 8 or 9 feet below the 60 fathom level, 20 fathoms west of this (Hunter's) shaft, and about 40 fathoms in length, reported to be worth 4 tons of ore per fathom, at 9l. per ton, but the water still flows out of the bottom, and the increase at the shaft is very little, which can now be easily accounted for, having discovered a small clay cross-course, which was undrained at that time, standing about 9 fms. to the west of the shaft, which serves as a dam for the water; and it is a question if the bottom will be drained before the 70 is reached and the cross-cut through to which point we hope to arrive before another general meeting takes place. The 60 is extended 90 fms. west of Hunter's shaft, 6 fms. of which have been driven by this company; the lode averages about 2½ ft. wide, and is composed of quartz and stones of copper ore, with a kindly appearance. We have communicated the diagonal engine-shaft from the 50 to the 60, and are now engaged in cutting down the same to its proper size. The lode in the 50, driving west of Hunter's shaft, is 1 ft. wide, containing a little ore, but not of much value. We are also extending a cross-cut at the 30, north of John's shaft, on the cross-course, to intersect Sampson's lode, which we expect to reach in about 10 fms. more driving in two months from this time; this cross-cut has not been so far exploring as we first calculated on. In conclusion, we beg to state, looking at the present prospects of the mine, that we estimate the returns of tin and copper ore for the coming quarter to be much the same as the last, with a decrease of cost, inasmuch as we have completed the engine at Wheel Daniel, with all the pitwork, launders, &c., for the purpose of supplying our different engines with good condensing water, and many other things that have been required, at a great expense, to put the mine in good working order, which will not be again required, and, of course, effect a great saving to the adventurers. With respect to the Boscawen's part of the mine, up to this time the returns have been very small indeed, and the expense falls very heavily on every proper; but if to be relied on (which we have no reason to question), a short time must put this part of the mine in a good position, and we hope to bring the whole to a successful issue.—THOMAS TRELEAVE, J. PETHERICK, EDWARD RICHARDS, RICHARD GILES, WILLIAM TRELEAVE.

The CHAIRMAN said the report just read so fully detailed the various points of operation that it was unnecessary for him to make any remarks, further than to state that the committee would be glad to afford any additional information shareholders desired.

The SECRETARY, in reply to a question, stated that in the accounts just submitted every liability was charged, including the engine, &c.

Mr. SIMS stated that, in company with Mr. James, he visited the mine on Tuesday last, and he might inform the adventurers that the whole of the machinery was in a most effective condition. An improvement had been effected in the stamping-engine, by a most saving of 2 tons of coal per day was made. The boilers were now supplied with pure water, and the crustation formed from the bad water previously supplied was gradually falling off, exposing the defective parts. When those had been repaired, the boilers would be equal to new.

The SECRETARY reminded the meeting that the crustation upon the boilers had so injured them that there had been supplied to the mine as many as four new boilers per annum, which had cost something like 1200l. That amount in future would be saved, as the water which was now supplied was pure, and did not affect the boilers.

The CHAIRMAN said there was one matter which had been prominently before the committee. It was this—the desirability of putting themselves in communication with Lord Falmouth for a revision of the details, until such time as the mine was brought into a paying state. He thought that it only required the whole of the details connected with the company to be brought before his lordship to ensure a satisfactory response to their application. Most of the landowners of Cornwall, possessing mineral rights, had from time immemorial granted concessions for the sake of having their mineral ground fully developed; and when any set of adventurers had expended a large amount of money, and had not been successful, the suspension of the dues might reasonably be expected. This course had been followed by the Basset family, the St. Aubyn family, Mr. Ro-

berts, and even by the Duchy of Cornwall; and it would certainly be anomalous if Lord Falmouth did not give a satisfactory reply to the application of the adventurers to remit the dues until such time as the mine was brought into a paying condition. The question was some time since brought before his lordship, when the dues were reduced from 1-24th to 1-36th; but, strange to say, when the mine was suffering from accumulated difficulties, and the adventurers were called upon to meet an expenditure of upwards of 10,000l., an unexpected and sudden notice was received from the toller of Lord Falmouth, that his lordship insisted upon the payment of the full (1-24th) dues. It certainly seemed, on the face of it, that his lordship's agents were not desirous that Great Wheel Busy should be tested in depth.

A SHAREHOLDER remarked that he could hardly think the various communications of the committee had been submitted to his lordship, or the shareholders would never have experienced such peculiar and inexplicable treatment.

The SECRETARY, in reply to remarks from several shareholders, stated that one of the most important points to be considered was the discovery in the bottom of the shaft, which was 120 fms. below adit, where a course of tin had been cut, valued by the agents at 40l. per fm. It was evident that this was a separate and distinct bunch of mineral, for the end driving in the 130 had a lode from 6 to 8 ft. wide, valued at 40l. per fm.; and, 40 fms. east of this point, Offord's shaft had been sunk below the 120, whence they were getting fine stones of tin, which was an evidence that this point was on the top of same run of ore that was met with at the engine-shaft. Moreover, in the winze sinking still further east, below the 110, was a lode valued for tin at 30l. per fathom. An improvement had taken place in the 100, east of Mathew's, where the lode had increased from being worth 4l. and 5l. to 30l. per fm., and in the winze sinking below the 90, considerably in advance of the above end, the lode, from being poor, had improved to 10l. per fathom; that was a distance of something like 80 or 90 fathoms, where the lode, from the east of Offord's shaft to this point, had been, and was at the present time, exceedingly productive. He considered these to be the important points of the mine, and should these discoveries continue there could be no doubt that the mine, after a short time, would be much more productive.

Mr. MACKENZIE suggested the advisability of the mine being inspected from time to time—say, once a year—by competent agents, to satisfy the shareholders that the property was being developed in a mine-like and economical manner.

The SECRETARY fully agreed with that suggestion, and stated that the property had recently been inspected by two agents, both of whom fully approved of the manner in which the mine was now being developed; and the report upon the Boscawen part of the sett was of the most encouraging character.

Mr. MACKENZIE inquired if it was probable any more machinery would be required? Mr. SIMS said nothing further would be required in the way of machinery. The large engine was now working at five strokes per minute, while this time last year it was working at nine strokes, and in a short time the engine which would be working at the adjoining mine would relieve Boscawen engine. There were upon the set eight steam-engines and about 24 boilers.

The report and accounts were then received and adopted, and a resolution unanimously passed to the effect that application should be made to Lord Falmouth for a remission of the dues until the mine had been brought into a paying state.

Messrs. Sims and James were appointed engineers to the mine, in the room of Mr. Sims, deceased.

The CHAIRMAN said as they had good reason for hoping they would soon arrive at a turning point in their affairs, it had been suggested by some of the largest shareholders that at the next meeting a special resolution should be passed altering the holding of the general meetings from quarterly to four-monthly. By the next meeting they had reason to hope that not only would Great Wheel Busy be paying cost, but that the Boscawen Mine, the development of which up to the present time had been a dead outlay, would then be meeting something like its costs. With reference to the accounts just passed, he might, perhaps, state that the last month's returns, which had realised 2500l., had not been included—in fact, it was a debtor and creditor account precisely similar to those presented in dividend-paying mines. The returns made up to the day of meeting had not been included, but only such returns had been included as had been made during the months the costs of which had been charged.

Mr. MACKENZIE said they all knew that no business could be carried on satisfactorily if it were in debt, and, therefore, they ought to make a call, which would clear off all the liabilities.

The CHAIRMAN said that a call of 10s. per share would be sufficient to liquidate the whole of the liabilities, except the amount due to Lord Falmouth for dues.

Upon the proposition of Mr. ROWLANDS, seconded by Mr. MACKENZIE, a call of 10s. per share was made.

Mr. SIMS, in reply to a question, stated that there was no doubt the mine had considerably improved, and if those improvements continued, which there was no reason to doubt, the returns would in a short time very considerably increase, and the costs would henceforth be proportionately diminished. The most important point was the improvement which had recently taken place in the tin ground in the bottom of the shaft. The general opinion in the neighbourhood was that this extensive property would soon produce a much more favourable position than it at present occupied. He had lately spoken with some of the oldest practical men in the neighbourhood, all of whom agreed in the opinion that Great Wheel Busy was never worked better than at the present time.

The committee of management having been re-elected, a vote of thanks to the Chairman was passed, which terminated the proceedings.

PENDEEN CONSOLS MINING COMPANY.

A general meeting of shareholders was held at the London Tavern, on Tuesday, Dec. 31, at 10 o'clock, Mr. W. BAWDEN in the chair.

Mr. D. COHEN (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed.—A statement of accounts for Oct. and Nov. showed a profit of 266l. 2s. 4d. The assets exceeded liabilities by 1219l. 10s. 3d.

The report of the agent (Capt. J. Warren) was read. It stated that in the 143 fathom level north the lode was 2 ft. wide, producing copper, but not to value; in the 142 fathom level the lode was 4l. per fathom for tin; in the 130 north the lode was not to value; in the 130 south the lode was producing tin, but not to value—there were 15 fms. more to drive before this end got under the tin ground in the bottom of the 118 south; in the 118 north the lode was poor; in the 118 south the lode was worth 40l. per fathom for tin; in the 106 north the lode was poor; in the 106 south the lode was producing a small stuff of low quality; in the 94 south the lode was congenial for tin; in the 82 north the end had improved during the last week, and the lode was letting out more water, which they considered a good indication of getting near the great Pendeen lode; in the 82 south the lode was small and poor; the adit level had been driven south 6 fms.; lode at present poor; the copper spots (three in number) were worth, on an average, 8l. per fathom.

A letter was read from the purser (Mr. R. White), in which he stated that he trusted the sales of tin had come up to expectations. They had now, he might say, tons more in store of dressing. They had undergone through a good piece of tin ground in the 118 south, the present end containing a good lode. They hoped before another meeting to have something important to report respecting the north part of the mine.

Mr. McALLAN wished to know if more tin was being raised than could be stamped by the power at present at the command of the agent?—The CHAIRMAN said he had no doubt, basing his calculations upon the rule adopted in Cornwall, that there was now being discovered three times as much ore as was being brought to market.

Mr. JAMES said he understood Mr. McALLAN's question to be this—Would more tin be brought to market if there were more stamps?—The CHAIRMAN thought there would, for there was a great deal of ore ready for stamping.

Mr. JAMES said that the stamps had been at work for only one month, the quantity of tin returned during the two months had been double that returned during the corresponding period immediately preceding.

The CHAIRMAN thought they had good reason to hope that before the next meeting they would be under the new lode.

Mr. JAMES wished to know if the mills referred to at the last meeting had been given up?—The CHAIRMAN replied that they had not been given up; but the committee wished to have the whole affair in one "take," so as to prevent two or three takes.

Mr. CLIFFORD said the object was to secure the water before the stamps were erected. Mr. McALLAN thought the general aspect of the mine was of an encouraging character. Mr. JAMES reminded the committee that it was no use getting ore unless it was brought to market.

The report was received and adopted, and the accounts passed and allowed.

The committee of management were re-elected.

The CHAIRMAN said, as the mine had but one captain, and as the purser took a great interest in the company, the committee wished to recommend that the salaries of the captain and purser should be increased one guinea per month. At present the captain had seven, and the purser four, guineas per month.

Mr. CALLAN said that, if they wished their business to be respectfully conducted, they must pay respectable salaries; and he would propose a resolution in accordance with the recommendation of the committee.

Mr. JAMES having seconded the proposition, it was put and carried unanimously.

A vote of thanks to the Chairman and committee terminated the proceedings.

TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

Notwithstanding the interruption to the general business of the Mining Share Market, caused by the recent holidays, as well as the preparation for and settlement of the fortnightly account which took place on Tuesday, there appears to have been a large amount of *bona fide* transactions during the week. There have been some very important advances in the quotations and actual dealings in many of the leading dividend and progressive mines, in which the public have largely participated, giving a more cheerful tone to an improving market. The account passed off more satisfactory than anticipated; and although the delivery of EAST CARADONS were free and large during the early part of the day, there was an apparent scarcity in the latter portion.

WHEAL SETONS have been in good demand, and very considerably advanced.—WEST SETON and SOUTH PARKS have changed hands.—TINCROFT, SOUTH TOLGUS, GREAT SOUTH TOLGUS, STRAY PARK, WEST T. LOGUS, COOK'S KITCHEN, and a few others, have been in good demand at market prices.—WEST CARB BREA, CARBOLL, GRANBLER and ST. AUBYN, CLIFFORD, EAST GREENVILLE, WHEAL GREENVILLE, and UNION have also been freely dealt in, without noticeable improvement in price.—NORTH CROFTY and NORTH DOWNS have been done at quoted rates.—NORTH TREKERRY and NORTH ROSKEAR are in great request, at higher prices.—WHEAL HARBRETT and EAST ROSEWARNE have informed, and in fair demand.—EAST CARADONS have, as usual, shared largely in the transactions of the week, attended by frequent and violent fluctuations. On Wednesday last a sudden decline of from 3l. to 4l. per share took place, without any apparent cause, and shortly after a reaction as strangely followed, when they recovered to nearly their former price. These measures were, no doubt, promoted with an object in connection with the unsettled contracts for the account.—MARKET VALLEY and LUDGOW have been largely dealt in without any particular change.—TRELLAWNY, MARY ANN, HERON-FOOT, &c., have changed hands at fair market quotations.—LADY BERTHA and WHEAL EDWARD have been in request at minimum prices.—GREAT WHEAL FORTUNE, WHEAL GRYLLS, TRELOYN CONSOLS, and BASSET and GRYLLS continue in good demand at present rates.—ST. JUST UNITED have been largely enquired for, and shares have considerably advanced.—TOLVADENS have been sought for at improved rates.—PROVIDENCE and MARGARET find buyers at present quotations.—NORTH MERLA, BONE LAKE, BRYN GWISIO, and FANT-P-BUARTH have been freely dealt in, consequent on the reported improvements in the prospects of the respective mines.

At EAST CARADON, on Friday last, they intersected the new lode in the 70, where it was found 15 in. wide, worth 20l. per fathom. The branch intersected a few days previously, worth 10l. per fathom, is only 2 feet from the main lode, and will, no doubt, fall into the latter. The following report has been received this day (Thursday):—Caunter Lode: The 70m. level west is worth 35l. per fm.; the 70 east, 45l.; the 60 east, 20l.; the 50 east, full 55l. per fathom.—New Lode: The 70 west is worth 30l. per fathom; the 70 east, full 55l. per fathom; and the 60 east, 20l. per fathom. The winze sinking in the bottom of the 60 is worth 35l. per fathom. No other change to notice.

WHEAL EDWARD expressed the more cheerful appearance than for some time past, and several improvements have been noticed, which are likely to lead on to discoveries of a more permanent character. The bottom level west is in a very promising lode, and important results are anticipated as this end approximates the caunter lode. There are several places in fair courses of ore, and from the many new features which indicate a favourable chance, early improvements may be expected here,

WHEAL CARBON is represented to afford some hope that an important change is about to take place. The lode in Cock's shaft has much improved in appearance, and producing 3 tons of mundle and copper ore per fathom, one-third of which is copper, and improving in going down.

At the ARLES Mines the prospects are considered by practical miners as of the most encouraging character, requiring only time and depth to more fully develop the several promising levels. There is little doubt but large quantities of tin will be raised on the opening of the next level. The shaft is down 6 fms. below the 25, and the ends at that level have laid open some good tinny ground; that the lode continues productive in depth is evident, from the fact that the winze sinking below the 25 continues large, and worth 15l. per fm. The slopes in back of the 20 are also yielding good work for tin.

At GREAT NORTH TOLGUS the lode in the flat-roof shaft is represented as very encouraging, yielding good work for copper; the lode is full 2 feet wide, with productive ore of 15 in. wide, whilst the matrix of the lode generally is more than promising. The operations are going on actively and expeditiously towards the developing of the several well-known lodes which traverse this sett, and found so productive in the neighbouring mines. The geological position of this sett, its proximity to, and possessing the same great cross-course which has contributed so largely to the wealth of some of the most celebrated mines of the county, are matters of the weightiest consideration. Whilst speculation appertains to all mining operations, however great the advantages proposed, there appears very little room for scepticism as to the result when the great objects contemplated have been attained, and to accomplish which the most energetic measures are being employed.

At EAST POOL, two-monthly account, held this week, a dividend of 5l. per share was declared.—At NEW SETON meeting, held this week, a dividend of 5l. per share was made.

WHEAL HARBRETT is reported to be looking better in the 115 end, going towards the winze sinking in the bottom of the 100, which is nearly holed to the 115, and when completed they purpose driving towards the end; the lode in the winze is still worth 60l. per fathom for tin. The slope east of the western winze is worth 20l. per fathom. The lode in Alexander's shaft, 15l. per fathom for copper. The lode in the deep adit level, and the slopes above, are worth 8l. per fathom respectively.—At EAST ROSEWARNE the 65 is valued at about 11l. per fathom, and the 55 continues to look very promising, carrying good stones of ore. The 55 west has improved, being now worth 30l. per fm.; the slope above is valued at 25l. They purpose selling on the 5th inst. 115 tons copper ore. Little work has been done in the 65, in consequence of the holidays and the operations connected with the casing, &c., of the shaft, necessary to bring the same into efficient working order.

WHEAL TREMAYNE: The general prospects of this mine have very much improved, and there is every probability of it becoming a profitable and permanent paying mine. The new engine-shaft, down below the 133, is opening up some excellent tin ground. In the 123 end they have a good lode, worth fully 25l. per fm. The winze sinking under the same level, on the same lode, is valued at 14l. per fm. The same lode, in the 115, is worth 20l., whilst the slopes in back and bottom are valued at 12l. per fm.; and there is every appearance of their getting into a good and long run of tin ground in that direction.

WORVAS DOWNS is represented to hold out considerable promise, and from its locality and general appearance there is every reason to calculate on its becoming a productive tin mine. The water has been drained to the bottom, and there is a large and productive lode in the 60 east, the back of which they have commenced stoping. The lode in the winze sinking below the 40 fathom level west has again improved, now valued at 40l. per fathom.

At GREAT WHEAL FORTUNE a quarterly account was held on Wednesday, Dec. 31, making an excellent finish of 1862, by declaring the first dividend of 20s. per share, carrying to the credit of the next account 743l. 11s. The agent's report of the mine is of the most promising and encouraging character, and from the quantity of tin laid open, and present prospects of all the productive places, there is every reason to calculate on the dividends being permanent and increasing.

GREAT WHEAL FORTUNE continues to look remarkably well on Carmel lode, the recent improvements fully maintaining their value and appearance. It is rumoured that the returns of tin for the quarter will exceed that promised at their last meeting.—GREAT WORK is reported to have generally improved, and likely to become a profitable mine. The returns of tin are gradually improving.—GREAT WHEAL VOR: WHEAL METAL: The bottom levels are stated to be less promising than for some time past, and the general prospects not so cheering; improvements at that point are anxiously looked for.

SITNEY CARNMEAL: The prospects here are deemed of a most promising character, affording every encouragement to expect high and profitable results. At the boundary shaft they are cutting a pit 50 fathoms from surface, preparatory to sinking for a deeper level, where they anticipate reaching the rich run of tin ground in Great Fortune. In the 50 cross-cut north they have intersected a large and promising lode, which they are about to develop by opening east and west. The 50 east continues a large and flatter lode, which presented such pleasing features in the 30. The flat-roof shaft is down several fathoms below the 60, where the lode is looking very favourable, with every appearance of an early and important change. There are other important points to which operations are being directed, which when reached will place the mine in a prominent position.

ST. IVES WHEAL ALLEN is represented to be looking very encouraging, and holding out indications of improvement in several important points. The lode, south of the adit lode, is valued at 20l. per fm. for tin. The ground, east of Gleiser's shaft, is of a very promising character. The lode in the 30 is worth upwards of 12l. per fm., and the winze sinking below the 20 is valued at 10l. per fm., with other places of much promise.

BAYN WILCO is reported to have improved in several important points, especially in the 75 west, where they have a large and productive lode for large yielding 3½ tons per fm. The slopes are also yielding profitable work in a long run of good ore ground, with an improvement in the back, in a pitch which recently became highly productive. There are several important discoveries looked for as soon as the objects now aimed at are completed. Upon the whole, the mine is looking remarkably well in its present position.

—LONG RAKE is reported to have assumed a very generally improved appearance, and, from the nature and character of the improvements, likely to lead to more permanent and profitable results.

FANT-P-BUARTH.—The recent discoveries on the new lode in the 44 and 10 fm. levels continue very good, yielding large solid stones of lead of 2 cwts. and upwards. Great importance is attached to the discovery, from the fact of the lead holding down to the deepest point laid open. A new shaft has been commenced to sink on the course of the lode to the 44, which will, no doubt, lay open a vast amount of rich mineral ground. The shaft has been taken by contract of a favourable nature to the adventurers, and the greatest exertion will be used to complete the same as early as possible. The other productive places maintain their character and value. Rich samples of the lead raised from the two discoveries can be seen at the office of—

JAMES LANE.

From Mr. GEORGE BATTERS:—The new year commences with the market for mining shares in a quiet state; its condition and prospects are, however, far from being unsatisfactory. The American war drags its miserable length along, and has, during the year, prejudicially affected the metal markets. They have, nevertheless, been maintained on a remunerative and satisfactory price to the miner, and 1863 opens with strong symptoms of improvement. New markets have been opened up, which have well filled up the hiatus created by the American war. When this war commenced America held large stocks of metals, which are now cleared off. She is now returning to us as a customer, and so long as any gold exists in the country, she must have our metals and manufactures in an increased ratio, inasmuch as her own powers of creation have lessened by the war, while her powers of consumption and destruction have increased. The past year has been about an average one to Cornwall mining, while the market for mining shares in London has been developed in a manner hitherto unprecedented. In view of the securities have accordingly been supported and commended for their inviolable character; and a feature hitherto happily unknown has also developed itself—viz., heavy transactions in time bargains. Hitherto this class of business has been chiefly confined to the walls of the Stock Exchange, and in railways, the funds, &c. However, it is too much to expect so exciting and speculative a medium as British mines present, to be overlooked by the speculative spirit of the age, when dealings of this character are carried on to an enormous extent in the Mining-lane produce markets, as well as the cotton markets of Liverpool and London. As far as morality or utility in supporting the most important interest in our country is concerned, it is matter of grave doubt whether or not the dealings of the character alluded to are not highly mischievous, inasmuch as by combination shares are driven up to prices far beyond their value, or depressed by selling as unreasonably below their value. Mining shares are too restricted a commodity to be thus handled without resulting in misery and ruin to some concerned. Transactions in this market ought to be as much as possible restricted to dealings for cash. Mines that promise to command chief attention from the public during 1863, from the merits of the undertakings are—Devon Great Consols, South Caradon, Wheal Seton, West Seton, North Roskear, East Caradon, West Tolgus, South Tolgus, Great South Tolgus, Wheal Union, East Carb Brea, North Crofty, South Crofty, East Pool, Tincroft, Cook's Kitchen, and Dolcoath; an investment in each of this group will bear looking at twice a month hence.

NORTH ROSKEARS have been largely dealt in, and have risen to 52, but closed at 49 to 50. This is one of the very cheapest mines in the market, being only divided into 700 shares. The prospects are of the very highest order; the extent of sett is nearly equal in length on the course of the lodes to Wheal Seton, West Seton, and New Seton all put together. There are two distinct mines—the Eastern, or tin mine, working on the Seton lode; and the Western, or North Roskear main copper lode. In the tin mine the reserves are worth 50,000l., and in the copper mine 37,000l.; this latter can be taken away for 2s. 6d. in 11. The sett is nearly 1½ mile in length, and ought to be worked as two or three separate mines. Although amply found in machinery, with dressing-floor, and appliances for the manipulation of tin in the most approved construction, this property, simply because it is not a market mine, is selling for the absurd price of 35,000l. in its entirety, while New Seton, with all the work yet to be done, and without a discovery, is selling for half as much again. The price of North Roskears is a perfect enigma; many calling mines, with scarcely a chance of success, are selling for more money. An improvement has taken place in the 140 fathom level west on the caunter, or Wheal Seton lode: this is the same lode at which the discovery in Seton has lately been made, on which shares have risen to 220l.; the lode is producing rich work for tin and stones of copper, and is now about 40 fms. from the cross-course that divides Wheal Seton from North Roskear. On the North Roskear main lode, at the 154 fathom level west, the lode is worth 65l. per fm.; the slopes in the back of the 184, east of Pearce's shaft, are worth 70l. per fm., and let at a price equal to a tribute of 1s. 6d. in 11. Next week the sinking of

BRITISH MINES.

DISCOVERY OF GOLD AT THE CAPE OF GOOD HOPE.—Gold has been found upon the farm of Mr. Mostert. The gold has been analysed by Mr. Schmiedelroew chemist, and the *Argus* is assured by the "Californian gold digger" who dug it up, that Mr. Schmiedelroew has pronounced it to be "quite pure."—*Cape and Natal News*.

but poor for tin. We are also stopping the lode to the east of the winze, which is looking very much better, and producing some good work for tin. Our tribute pitches are without alteration.

CWMBRANE.—Jan. 1: The lode in the shaft below the 30 is producing 15 cwts. per fathom; the 30 south 5 cwts. per fathom. The rise in back of the 10 is worth 6 cwts. per fathom. The slope in bottom of the same is worth 6 cwts. per fathom. Floyd's slope is worth 14 ton per fm. No alteration in any other part of the mine. We delivered on the 26th ult. to Messrs. Sims, Williams, and Co., 20 tons of lead, at 121. 9s. per ton.

CWMEIRIAN (GOLD).—Capt. Williams, Dec. 29: Waterfall Lode: Four men have driven out his lode 5 ft. 6 in.; the ground is easier for driving. No other change to mention. The new shaft is being driven by six miners and two labourers, sinking by 2 ft.; the water increases, and the ground harder for boring.

DEVON NEW COPPER.—P. Hawke, Dec. 31: The progress in driving the cross-cut east, in the 100, is somewhat slow, in consequence of the porous nature of the ground as we approach the productive part of the lode; the product from this point at present being spar, capel, and mundle, spotted with yellow copper ore. In sinking the winze below the 88, the lode shows a most splendid appearance, the component parts consisting of quartz, fluor-spar, and mundle, with rich yellow copper ore intermixed. Water again accumulates in the bottom of the winze, which affords sufficient proof that the productive part of the lode in the cross-cut east, in the 100, yet remains to be reached. On the leader east, in the 100, being struck into the water will at once percolate through to the bottom level. Having fixed the necessary gear to get the large axle (14 tons weight) belonging to the 60-foot water-wheel on the pit, and in its place on the chains, I am pleased to state that from the progress made we expect the axle will be lodged in its place this evening, when fixing the arms, &c., will be proceeded with in regular succession. The puddling of the reservoir, including the sides and bottom, is nearly completed.

EAST BRONFLOYD.—C. Williams, Dec. 30: The lode in the stope, west of engine-shaft, is from 8 to 9 feet wide, consisting of slate, spar, and silver-lead ore, yielding of the latter from 22 to 23 cwts. per fathom. The lode in the 10, east of shaft, is 31 feet wide, consisting of quartz, spar, and ore, yielding of the latter 22 cwts. per fathom. We have a very good lode in this end, forming into one great body going east. The engine-shaft is going down rapidly, the ground being easy for progress. The dressing is being carried on regularly, and the ore is turning out quite equal to expectation. The slime machinery will be completed shortly, and everything in full work. All the surface work is going on well, and the machinery in good order.

EAST CARADON.—Jas. Secombe, Dec. 31: Canter Lode: The 70 west is worth 351. per fm.; 70 east, 451. per fm.; 30 east, 201. per fm.; 30 west, 151. per fm. The 70 west is worth 301. per fm. In the 70 east both parts are worth 301. per fm. The 60 east is worth 201. per fm. The winze sinking in bottom of the 60 is worth 351. per fathom. No other change.

EAST CARN BREA.—Thos. Glanville, Jan. 31: In the 60 west the middle lode is yielding 2 tons of ore per fm. In the 50 west the new lode is yielding 1 ton of ore per fathom. In the 50 west the south lode is yielding 1 ton of ore per fm. In the western shaft the lode is yielding 1 ton of ore per fm.

EAST CLOGAU (GOLD).—K. Roberts, Dec. 27: In the past week we have driven No. 1 level on St. David's lode 5 ft. 6 in.; there is no change of importance in the character of the lode. No. 2 level, on St. David's lode, has been driven 6 ft. 8 in. this week; the character of the ground at present is rather hard, but appears to be improving a little; the lode, which has been small, is enlarging, and assumes a more promising appearance. In No. 2 level, on St. James's lode, our progress in driving is 4 ft. 8 in.; the lode is without alteration, and is much the same in character as it has been for several weeks; composed of quartz and spots of copper, with particles of visible gold. According to Mr. Wright's instructions, I have put four men to drive No. 1 level on St. James's lode, the former party having met with a cross-branched in driving this level, which has disordered the lode; I expect, after driving a few fathoms more, to have the lode again. I also put two men to coasten for St. James's lode, say 30 to 40 fms, lower down the mountain than the present. In No. 1 level, on St. John's lode, the lode is large and well defined throughout, containing sulphate of copper, iron pyrites, quartz of a hard and compact nature, and highly ferruginous kindly iron ore, green, and I should add its development must sooner or later produce satisfactory results.

EAST GUNNIS LAKE AND SOUTH REDFORD.—Wm. G. Gard, Jan. 1: On again taking down the lode in the 36 and we find the lode is still worth 4 tons per fm. The several other points of the mine are without alteration.

EAST ROSEWARNE.—J. James, Dec. 27: There has been but little done at the 65 during the week; the men have been casing and dividing the shaft. In course of next week we shall open on the lode, when I will report its value. The 55 east is much as last reported. In the 55 west the lode is from 14 to 18 in. wide, worth 301. per fathom. The stope over this level is 251. per fm. There is no change to notice in any other of our operations. We sampled on Tuesday last (computed) 113 tons of good quality ore.

EAST TRESKERBY.—John Nacarrow, Dec. 27: The ground in the 55 east is very favourable for ore, but is not ready for driving; the lode presents just the same appearance as last week, and is letting out plenty of water. In the 40 east very little lode has been taken down; there is, therefore, no change to report on. The 40 west improves in appearance; in each of these places, as well as the 40 north, every effort is made to get on as fast as possible.

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Dec. 27: The engine-shaft to sink below the 55, by 12 men, at 301. per fm.; lode from 24 to 3 ft. wide, composed of quartz and capel, with ore—a kindly lode, the lode is partaking all the characteristics of the lode at West Basnet, before it made the ore. The 55 east, to four men, at 31. 10s. per fm.; lode 18 in. wide, and producing some good work for tin. The 55 west, to four men, at 71. per fathom; lode 18 in. wide, producing some good tin; here we are expecting an improvement, as we have a good lode in driving the 45 over this place. The 45 east, to four men, at 51. 10s. per fm.; lode 20 in. wide, producing some good work for ore and tin, worth 61. per fm. The 45 west, to four men, at 51. per fathom; lode 20 in. wide, producing some good tin, worth 61. per fm. Two stopes in back of the 45 west, to six men, at 11. 10s. per fm.; lode worth 101. per fm. The stope above the 45 east, to four men, at 21. 5s. per fm.; lode worth 51. per fm. for tin. New Lode: The 45, west of cross-cut, to six men, at 71. per fm.; the lode, or part thereof split into branches, but which we think will soon make a junction again, when we expect an improvement, because they are producing some good tin.

—G. R. Odgers, Wm. Bennetts, Dec. 31: We see no very material alteration in this mine since our advice of Saturday. We find some good yellow ore in the 45 east.

EAST WHEAL RUSSELL.—J. Goldsworthy, Dec. 31: Homersham's Shaft: There has been nothing done towards sinking since last reported. The shaftmen have been engaged on other work. In the 120 cross-cut north the capel part of the lode is not as yet cut; throughout the capel contains a little grey copper ore. In the 120 east, on the south part of the lode, the lode is 2 ft. wide, composed of capel, quartz, prlan, and good stones of yellow copper ore. In the 110 east, on the south part of the lode, the lode is 2 ft. wide—poor. In the 110 east, and west of Soper's cross-cut, the lode is 2 ft. wide, composed of capel, quartz, prlan, and producing saving work. John's stope, in the back of the 110, is worth 251. per fm. In the winze sinking in bottom of the 110, east of Fewell's cross-cut, on the north part of the lode, the part of the lode taken down will produce 1 ton of good copper ore per fm., with a part standing to the north. In the 88, west of Hiltchins's engine-shaft, the lode is 2 ft. wide, of a kindly appearance, and producing saving work. No other change throughout the mine to notice since last reported.

J. Richards, Jan. 1: Homersham's shaft is in regular course of sinking below the 120 fm. level in favourable ground. In Maynard's cross-cut north, at the 120 fathom level, the capel part of the lode is being cut through, and contains some good spots of grey ore. In the 120 fm. level east, on the south part of the lode, the lode is 2 feet wide, consisting of quartz, capel, prlan, and a small proportion of copper ore. In the 110 fm. level east, and east of Soper's cross-cut, on the south part of the lode, the lode is 2 feet wide, and unproductive. In the 110 fm. level east, west of Soper's cross-cut, on the south part of the lode, the lode is 2 feet wide, composed of quartz, capel, prlan, and saving work for copper ore. The lode in John's stope, in the back of the 110 fathom level, east of Fewell's cross-cut, to six men, at 251. per fathom. Brokenish's winze, sinking below the 110 fm. level, east of Fewell's cross-cut, the lode, or part thereof being carried, is 2 feet wide, composed of capel, quartz, prlan, and ore, worth 1 ton per fathom. In the 110 fm. level east the lode is small (1 foot wide) and without ore. In the 88 fm. level east the lode is 2½ feet wide, composed of capel, quartz, and rich stones of copper ore. In both the 66 and 45 fm. levels east the drivages are by the side of the lode. In the 88 fm. level, west of Hiltchins's engine-shaft, the lode is 2 feet wide, consisting of mundle, capel, quartz, prlan, and a little saving work for copper ore.

FRANK MILLS.—J. P. Nicholls, M. Cornish, Dec. 31: The engine-shaft is down about 5½ fms. under the 84 fm. level; the branch or dropper, to which we have before referred, owing to the weight of the shaft, has gone out to the west, and is carrying with it good stones of lead ore; the ground maintains a very favourable character. In the cross-cut east from the 72 north, on the west lode, we have not yet reached the east wall, but the part of the lode we are passing through is hard, consisting of white iron, quartz, mundle, and lead ore, but not enough of the latter to value at present. The 72 north, on the west branch, is disordered by a slide, and the end consequently poor. The 60 north, on the same branch, is still looking most promising, and yielding a small quantity of lead ore. Since intersecting the west lode, in the 60 north, we have driven on its course 1 fm. north and 1 fm. south from the cross-cut; it is producing a small quantity of lead ore, and from its appearance we anticipate an early improvement. The stope in the back of the 72, on the west branch, will yield ½ of a ton of lead ore per fathom. There is no change in the tribute department, or any other part of the mine, worthy of remark.

GAWTON.—G. Rowe, Dec. 27: There is no change in the appearance of the lode in either point of operations during the past week. We calculate to sample on Tuesday next 90 tons of copper ore.

GOGINAN.—Dec. 30: The lode in the 100, west of Gilbertson's shaft, is 5 feet wide, a strong and kindly lode, intermixed throughout with spar and blende, and a little ore at times; ground much harder. The lode in the winze sinking below this level, east of shaft, is 4 feet wide, yielding good saving work. We have two pitches over this level, east of Taylor's shaft, yielding on an average 9 cwts. of lead ore per fathom. The lode in the 80 is from 3 to 4 feet wide, looking promising, and yielding good saving work. The pitches over the 60, three in number, are producing on an average 10 cwts. of lead ore per fm. At Level Newydd we are making good progress with the new shaft below the shallow adit level. The dressing, &c., are all going on regularly, and we are doing our utmost to get as much ore as we possibly can by our next sampling.

GREAT BRIGAN.—T. Trelease, G. Oates, Dec. 27: In consequence of a breakage taking place last Sunday morning in our balance box, together with the Christmas holidays, very little has been done in the bottom part of the mine for the past week, but we are happy to say that everything is now in good repair again, and the mine is in full work. The lode in the 61 is still worth 151. per fm. The lode in the cross-course shaft, sinking below the 49, is 2 ft. wide, with stones of ore. The lode in the 49, east of adit shaft, is worth 121. per fm. No lode yet intersected in either of the cross-cuts at the 42 and deep adit levels. The lode in the deep adit level, driving west of Oates's shaft, is about 2 ft. wide, producing stones of copper ore. Nothing else new since our last report.

GREAT LAXEY.—R. Rowe, Dec. 30: We have a large fine lode for copper in the 190 south, if it goes on it will be an immense thing for the mine. We have sampled 100 tons of lead for sale on Jan. 11, and shall have 200 tons of copper ready on Saturday.

GREAT NORTH DOWNS.—T. Trelease, Dec. 31: In the past week we have done a very little in the bottom of this mine, in consequence of the adit level having broken down in the North Downs Mine, in the Wheal Pwllor part of the set; we discovered this in the early part of the week, and it not only increased the water at the engine-shaft, but quite filled our New Brigun up to the 40. This adit will be put in good repair again in a few hours from this time, when we hope to find the water again fall off to the usual water course. The lode in the 40, driving west of Pendave's shaft, is 2 ft. wide, producing stones of copper ore, but not to value. The New Brigun lode in the 20, driving east of Gribble's shaft, is 15 in. wide, producing a little ore of a most promising appearance. Nothing else new throughout the mine.

GREAT NORTH TOLGAR.—C. Henwood, Jan. 1: We have taken down the lode in the flat-roof shaft to-day, and I am happy to inform you it is steadily improving as we sink, being now from 2 to 2½ ft. wide, with a leader on the footwall 1 ft. wide, and on the hanging wall 6 in. wide—good work for copper ore; and, from the appearance of the lode, I think it will still further improve as depth is attained. The water is also much quicker, which, coupled with the highly kindly character of the lode, I consider favourable symptoms. We are getting on well with our surface work.

GREAT TREKUNE CONSOLS.—W. Richards, Jan. 1: The lode in the 92, west of Hober's shaft, is 2 ft. wide, of a kindly character. The lode in the 92, east of Hober's shaft, is 2 ft. wide, of a kindly character. The lode in the 92, east of Hober's shaft, is 2 ft. wide, of a kindly character. The lode in the 92, east of Hober's shaft, is 2 ft. wide, of a kindly character.

wide, containing compact and friable quartz, felspar, flookan, capel, a good deal of mundle, and good stones of rich copper ore—a very encouraging point.

GREAT RETALLACK.—W. H. Richards, Dec. 30: We have fixed the lift at the 60, and are now ready to sink again. We shall also cross-cut north through the lode at this level, and open on it east and west. In the 40, east and west of engine-shaft, there is no change of importance since my last, and the blende pitches are looking much the same as for some time past.

GREAT SOUTH TOLGAR.—John Daw, Dec. 31: Very little has been done in the past week in Lyle's shaft or the 140 fathom level west, having had a slight breakage in the engine, which let in the water. In the 125 fathom level, east of new shaft, the lode is 1½ ft. wide, producing a little copper ore, but not enough to value. We shall sample about 100 tons of tin-stuff to-day.

GURLEY.—J. Curtis, W. W. Martyn, J. Rees, Jan. 1: There has been no change of importance in any of our tinwork operations, with exception of the 30 east, in the Wheal Fox, where the lode is now getting clear of the influence of the cross-course, and within 5 or 6 fms. of the commencement of the productive ground through which the 20 has been passing for the last 30 fms. We have sampled 80 tons of copper ore for sale on the 28th inst. Our tribute pitches are yielding the usual quantity of tin.

GWYD R. PARK CONSOLS.—Capt. Smyth: We have not taken down any lode in Gwyd R. Park deep adit this week; therefore, I cannot see any change. I have again set the end to six men, at 81. per fm., stent for the month. I have also set the Gwynn Liffon adit to drive west on the east and west lodes to six men, at 91. 10s., for 1 fathom; the ground seems likely to improve, otherwise I would have given them a longer stent.

HARWOOD.—J. R. Rase, Dec. 24: I think we are close up to the vein with the cross-cut, as we have strings of spar, &c., and we are driving this end night and day; until this is through we do not work the ore above, as it will come out so much faster and cheaper when the wagon comes under the work. The east end is worth 3 tons of ore per fm.; the west end, 1½ ton. We have another nice pile of ore outside.

—December 30: We have the vein to-day in the plate bed under the Scar limestone. We shall look to driving and bring the work out this way in a few days.

—J. Rase, Jan. 1: I beg to say we have risen about 2 fathoms in the vein from the cross-cut level, and they are sinking down from the sole of drift to meet; we cannot be many shifts before hoisting through; the ore sets down well. I shall set on two more cross-cuts into the vein immediately. We have got the dressing-floors covered, and are getting on well. The weather is favourable.

HAWKMOOR.—J. Richards, Dec. 30: The lode in the rise in the back of the 50 east is 1½ feet wide, producing some good saving work for copper ore. The lode in the 30, west of Graham's shaft, is about 1½ feet wide, composed principally of capel, with spots of copper ore occasionally. West Hawkmoor: 30, lode, driving west of the adit level, is 2 feet wide, composed of capel, peach, and some saving work for tin ore. In the level driving east of the stope the lode is full 2 ft. wide, composed of peach, mundle, and very good work for tin ore. On No. 4 lode we are driving west of the cross-cut, by two men, and the lode is somewhat disordered, although of a promising character.

HINGTON DOWN CONSOLS.—T. Richards, Dec. 31: There is nothing new to advise you of since the report for the general meeting. We sampled yesterday (computed) 390 tons of ore.

HOLMBUSH.—R. Pryor, T. Woolcock, J. Borlase, Dec. 30: In the 175, east and west, the lode is opening up through the ground. No lode has been taken down east of the winze, in the bottom of the 160, for the month. The lode in the 160, west of shaft, is improving. We have commenced to cut through the lead lode, from No. 1 winze, in bottom of the 160, which is yielding stones of lead. The stope in the back of the 160, ten in number, are each worth 201. per fathom. We have met with the cross-course in the adit level of Huel Down shaft, which has rather disordered the lode for the present. We are busily engaged dressing and preparing copper ore for the sampling, which will be about 200 tons.

KELLY BRAY.—S. James, Dec. 27: The lode in the 55 east is 2 ft. wide, composed of quartz, mundle, and stones of ore. We have taken down the lode in back of the 35 east, but it is not looking quite so well as when last taken down, but it is still a good lode, and looking well worth 101. to 121. per fm. There is no change to notice in the tribute ground since last reported. Eastern Mine: The lode in the 70 east is increasing in size, which is now from 1½ to 2 ft. wide, composed of soft mundle, quartz, white prlan, and occasionally stones of rich copper ore. The ground in the cross-cut, driving south at the same level, is eased for exploring, and still of a congenial character, carrying branches containing rich copper ore and quartz.

KESWICK.—J. Postlethwaite, Dec. 27: We have a very kindly looking vein in the end of the adit level, but not enough lead to value at present. We have nice stones of ore somewhat irregularly interspersed through the lode; the ground generally is favourable. I have let the end to drive at 5s. per fm. The stope over the adit is worth about 10 cwts. of lead per fm. for 5 fms. in length; the ground and lead are variable. The 50 north end is looking unkindly; the vein is irregular and unfavourable for lead; what little quartz we have is blended through a strong veinstone. In the 40 north end we have a small healthy looking vein, spotted with lead; the ground is close as yet, and I scarcely expect much lead until we get through the bar of hard ground. The stope over the 40 will yield 12 cwts. of lead per fm. In the 50 north end we have still a large friable quartz vein, full 3 ft. wide; we have found some loose stones of lead during the week, but have none in the end at present. We have driven nearly 3 fms. in the cross-cut, and have let the end to drive at 40s. per fm. The lode in the 50 is in close ground; the vein is split at present. We have a little lead, about 3 cwts. per fm., and six men in this rise; we want it through for ventilation. We will commence sinking in the 40 to meet it in a few days. In the 50 south we have a great change, both in ground and vein; the latter is now large and kindly, with stones of lead, and in every respect very promising for lead; and as for the ground, I have let it to drive at 35s. per fm. At Old Brandy I have stopped the cross-cut, as the nature of the ground is so unkindly, and the branch or vein we have cut through does not warrant its being driven north upon; I have, therefore, put the men to cut a few feet to the west from the western branch, after which I propose to rise a few fathoms at two points where we had indications of lead.

LADY BERTHA.—Capt. Harpur and Metherell, Dec. 31: In the 53 east the lode is 2 ft. wide, composed of peach, mundle, and quartz, intermixed with stones of ore. The lode in the 41 east is 2 ft. wide, consisting of mundle, peach, and ore, worth of the latter 1 ton, or 31. per fm. In the winze sinking below this level the lode is about 4 ft. wide, composed of quartz, mundle, and ore, worth of the latter 1½ ton, or 41. 10s. per fathom. The lode in the 30 east is 2 ft. wide, carrying peach, mundle, and ore, worth of the latter 1 ton, or 31. per fm. In the stope in back of this level the lode is about 3 ft. wide, composed of mundle, quartz, and ore, worth of the latter 3 tons, or 91. per fm. The stope in bottom of the 30 east is worth 2 tons, or 61. per fm. No change to notice in the tribute ground since last reported. The dialler is just now dialling the 30 east, as we intend to commence raising from this level towards the new shaft shortly. We sampled yesterday (computed) 136 tons.

LADY ELIZA.—Capt. Williams, Dec. 30: The end is looking very promising, and there are very good blotches of ore on the footwall, and I have directed the men to go on with the driving of the level.

LOWER PARK.—W. Davies, Jan. 1: The eastern shaft is down to the 40 yard level. We intend in a few days to put out a cross-cut to intersect the north vein. The cross-cut driving south of cross-shaft of a very promising character, with stones of ore occasionally. The stope in back of the 36 yard level is producing a little ore, but not enough to value. The 40 yard level, driving west from Stuart's shaft, has become more speedy for driving, but is at present unproductive for ore.

MAUDLIN.—J. Treagar, Dec. 27: The north lode, in the 57 west end, is from 5 to 6 ft. wide, principally mundle, with a little copper ore; the middle lode in this level west is 3½ ft. wide, producing good stones of yellow copper ore; the south lode is 1 ft. wide, producing occasional stones of copper ore; these are all parts of the great lode, and apparently will form a junction westward from the present ends. In the winze in bottom of the 50 the ore has gone out at a splice, succeeded again by gossan, but the south part of the winze is principally mundle, which is rapidly displacing the gossan; with ore, but in consequence of the weight of the shaft, the lode is not sinking in the tribute ground. The dialler is just now dialling the 30 east, as we intend to commence raising from this level towards the new shaft shortly. We sampled yesterday (computed) 136 tons.

MOLLAND.—Thomas Bennetts, Dec. 31: Having found there was more lode standing to the north in the 62 east, I set the men to cut through it at the rate of 81. per fathom, and, having just reached the north wall, I find the width of the lode to be 5 ft., composed of red iron, gossan, and quartz, spotted throughout with grey ore, and producing of the latter from 1 to 1½ ton per fm. This is a good feature in the mine, and, according to analogy, must lead to something good, provided we do not meet with a recurrence of the alidry ground, of which there is no appearance at present. The stope in back of the 42 east is producing from 1 to 1½ ton of tin per fm.; set two men, 1 fm., at 31. 10s. per fm. The stope in back of the 36 east is producing a little ore, but not enough to value. The 40 east end is looking unkindly; the vein is irregular and unfavourable for lead; what little quartz we have is blended through a strong veinstone. In the 40 north end we have a small healthy looking vein, spotted with lead; the ground is close as yet, and I scarcely expect much lead until we get through the bar of hard ground. The stope over the 40 will yield 12 cwts. of lead per fm. In the 50 north end we have still a large friable quartz vein, full 3 ft. wide; we have found some loose stones of lead during the week, but have none in the end at present. We have driven nearly 3 fms. in the cross-cut, and have let the end to drive at 40s. per fm. The lode in the 50 is in close ground; the vein is split at present. We have a little lead, about 3 cwts. per fm., and six men in this rise; we want it through for ventilation. We will commence sinking in the 40 to meet it in a few days. In the 50 south we have a great change, both in ground and vein; the latter is now large and kindly, with stones of lead, and in every respect very promising for lead; and as for the ground, I have let it to drive at 35s. per fm. At Old Brandy I have stopped the cross-cut, as the nature of the ground is so unkindly, and the branch or vein we have cut through does not warrant its being driven north upon; I have, therefore, put the men to cut a few feet to the west from the western branch, after which I propose to rise a few fathoms at two points where we had indications of lead.

NANTY.—Dec. 29: The lode at the roadway level, going north of the boundary, is 4 feet wide, composed of spar, blende, and clay-slate, with a little lead ore at times, but nothing of any moment. The lode in the 10 fm. level, above the deep adit, going north of boundary, is 5 feet wide, with a promising appearance, yielding 1½ ton of lead ore per fathom. The lode in the winze sinking below this level, 60 fms. north of boundary, is 6 feet wide, producing 1 ton per fathom. This winze will be communicated to the rise over the deep adit in about a fortnight. The three stopes over the 10 are yielding on an average 12 cwts. per fathom. The lode in the deep adit, north of boundary, is large, and yielding good saving work for dressing. The lode in the rise over the deep adit is 3 feet wide, yielding good saving work. The three stopes over the deep adit level are yielding on an average 14 cwts. per fathom.

NETHER HEARTH.—Wm. Vipond, Dec. 26: We have been proceeding with the sinking this week. No change to notice in the ground. I expect we shall be down to the middle of the limestone in another week. I would not recommend going deeper at present, but take up the stope to the vein, and see what the middle pitch is like. I think we can prove it to the depth we wish to be at. The carrier has not brought up the ladder this week, consequently we have not got the footway into the shaft, but shall put it in as soon as they come up.

NEW TRELEIGH.—F. Pryor, S. Mitchell, Dec. 26: Carr's: The 90, east of this shaft, is to-day presenting a much better appearance than for some time past, and it is our opinion we shall soon be in a position to value it. The 80 east at this time is unproductive. The 80, east and west, on the south lode is poor, although the lode is large. The 70 east is still very promising, but it is not quite equal to what we looked forward to; it will now produce full 1 ton of ore per fm. The 70, west of Carr's, is letting out more water, and is producing a little ore; the ground is better, and the water has been down to the 44, but in consequence of the breaking down of the adit near the Great North Downs, the water has risen to the 34, and will be in fork again by Tuesday—this adit is where our water is discharged through. Symond's shaft is eased down and made complete to the 34, and the levels cleared out. We shall not for the present drive this level, as it is, in our opinion, better to adhere to our former reports, drive the 44 to communicate with the 70 from Carr's, and not the 34 to communicate with the 60; the latter being in a run of poor ground, and not deep enough for the shoot of ore ground from Carr's. Our next sampling will not be less than 70 tons of ore in one month from this time. Our position in the eastern part of the mine will be better, and it is our opinion we shall be just in writing a better report than that of to-day, from present indications.

NEW TRELEIGH.—F. Pryor, Jan. 1: Carr's: No alteration to notice in this part of the mine since last week. The water is in fork again at God Fortune to the 44, and we calculate to complete the plunger, and drop the lift to the 50, in the course of another week.

NEW BIRCH TOR AND VITIFER CONSOLS.—J. Lean, J. Symons, Dec. 23: Hambley's Shaft: In the 36 west the lode at present is divided into three parts, being altogether 2 ft. wide, and presenting a very promising appearance, producing good stones of tin. We expect this lode will gradually improve until we reach the junction of the north and main lodes. We have six men here employed in cutting trip-planes, which we have set to-day at 51. per fm., cubic. As soon as this is completed we strongly recommend the running of the sinking shaft below the 36. In the 24 east, on north lode, the lode is 10 in. wide, worth 101. per fm., and is promising further improvement. The rise in back of this level is holed to the winze, which has ventilated both levels. We are now in a position to set to two pitches in this place at our next monthly setting. In the 12 east, on north lode, the lode is 18 in. wide, producing 8 cwts. of tin per fathom, or (say) worth at least 251. per fm.; ground good for driving. The pitches in this part of the mine present no new features—still yielding good work. Singular to say, we have in the back of the 12, on main lode, occasional rich spots of tin, which we have not seen before. The drainage of the 12, east of shaft, is very satisfactory. We shall not now have any difficulty in discharging the stuff. J. Lean's Shaft: In the deep adit level west the lode is 2½ ft. wide, composed chiefly of quartz and iron, producing occasionally good stones of tin. No change to notice in the pitches in this part of the mine.

NORTH BASNET.—T. Glanville, G. Davey, Dec. 31: In the 142, east of the flat-roof shaft, the lode is 2 feet wide, yielding stones of copper and tin ore. In the 102 west the south lode is worth 51. per fm. for tin. In the 102, west of Grace's shaft, the lode is yielding stones of copper ore. In the winze under the 92 the lode is 18 inches wide, producing 1½ ton of copper ore per fm.

NORTH BUTLER.—R. Pryor, Dec. 27: Setting Report: King's shaft to sink below the 70, by eight men, at 141. per fm., in a lode 1 ft. wide, composed of mundle, peach, and spar; the ground in this shaft is getting a little harder, and more congenial for mineral. The 70 to drive east of shaft, by six men, at 61. per fm.; lode 2 ft. wide, with mundle, peach, and spar, and at times spots of yellow copper ore; this end is letting out an increased quantity of water, which we consider to be a favourable indication. The 70 cross-cut to drive north of shaft, by six men, at 51. 10s. per fathom; the ground in this shaft is much harder than it has been for some time, and is letting out a large stream of water, as if nearing the lode. The 42 to drive east of shaft, by two men and two boys, at 41. 10s. per fm., where the lode is at this time disordered by a cross-head, but we have to-day broken from the back of the level some stones of good yellow copper ore. We consider our bargains to-day to be looking more promising than ever we have seen them before. Our engine and rods are working well, and we have had no let for the past month.

NORTH DOWNS.—F. Pryor, J. Grenfell, Dec. 26: During this week the adit between Great North Downs and Wheal Pwllor broke away, which has prevented us from driving our bottom levels, the men and agents having been engaged night and day, with a view of completing it as fast as possible; this will be done by to-morrow night, and we shall be in full work by Monday. The 80, east of Bennett's shaft, on the north lode, will produce full 1 ton of ore per fathom. The winze sinking below this level, west of Bennett's, and east of engine-shaft, is worth 251. per fm.—that is for 6 ft. long. The 40, east of Bennett's shaft, is 2 ft. wide, and producing good stones of ore. The 40, east of Bennett's shaft, is worth 121. per fm.; we set this shaft to sink below the 50. The rods are now completed through the 40, so as to enable us to sink this shaft, and when down to the 40, we shall at once commence to drive to communicate with the 60 from King's, and thus prove the eastern part of the mine.

NORTH HAFOD.—R. Williams, Dec. 29: The engine-shaft is now down about 17 fms., and the ground is favourable for sinking, but the water has much increased of late under the 12, and ere we sink much deeper we shall be obliged to send down a lift below the 12. I think the increase of water is due, in a great degree, to our approaching another lode, which we have opened on at surface on the south side of the shaft; the distance of the lode from Spargo's, on which we are sinking, is about 10 fms. at surface; but from the difference of their underlie the new lode must fall into Spargo's, and I am of opinion that the intersecting point cannot be far off the present bottom of the shaft. The lode in the shaft is not so large as it has been, and there is less time in its composition, and more sulphur, which at the increased depth I consider favourable features. We have occasionally some good spots of lead ore, and I feel some confidence that ere long there will be a tangible improvement.

NORTH HALLENBEAGLE.—J. Crase, E. Moreton, Dec. 27: The lode at Bingley's engine-shaft is about 2 feet wide, with a leader of ore in it about 4 in. big, and a great deal of water coming out of it. The lode in the 30, west of Bingley's engine-shaft, is greatly improved, now 18 in. wide, grey throughout. The lode in the stope in back of the 30, west of Bingley's engine-shaft, is much the same as when last reported on. We weighed our ore, sold on Wednesday last to Messrs. Grenfell and Sons, at 61. 11s. per ton, to-day; the parcel was computed at 20 tons, but weighed 19 tons 16 cwts., which, at 61. 11s., is 1291. 8s. 9d. We hope this is satisfactory, and further hope to give you satisfaction the next time we sample, which will be some time in February next.

NORTH LAXEY.—R. Rowe, Dec. 30: The lode in the 38 end, driving south, is again opening out; now 3 feet wide, producing good stones of ore. I expect my next report will give still better accounts. The 50 end, north and south, are without change, each worth about 1 ton of ore per fm.; the lode is about 3 ft. wide, and the north 2 ft. wide. We shall sample 20 tons of ore on Monday next.

NORTH NANT-Y-MWYN.—Capt. Williams, Dec. 30: There is some ore still to be seen as we are stopping away the ground, but it is my present intention to drive a cross-cut at the end of this level, north and south, to prove the width of the lode. I have no doubt about finding a good course of ore in a short time.

NORTH TRESKERBY.—R. Pryor, R. M. Kitto, J. Trengoning, Jan. 1: The lode in the engine-shaft, sinking below the 77, has within the last 3 ft. sinking undergone a most favourable change, and is now 3½ feet wide, producing fine stones of ore, worth about 1 ton per fm.; it has also drained the greater part of the water from the level above, which is now coming from the very bottom of the shaft; this we consider to be a very important feature; and

the mine, and, secondly, to prove the lode above that level. The prospects of the lode alone are most cheering, and I believe the results at a deeper level will be good and permanent. It promises to produce large quantities of copper ore; the lode is more than holding its size, and the copper of a stronger and more prominent character, composed of bell metal and peacock ore.

ROSEWARNE CONSOLS.—T. Uren, Jas. Berryman, Dec. 31: The lode in Ellen's shaft continues to look well, worth fully 35¢ per fm. and likely to improve. The pitches are yielding a fair quantity of copper ore.

ROSEWARNE UNITED.—E. Cartwright, Jan. 1: In the adit west of Pool's shaft the lode is 2 ft. wide; it contains munda, spar, and a little copper ore. In the adit east of main shaft, on Giesler's lode, it is 1 foot wide, producing gossan, and impregnated with copper ore. In the adit east of Giesler's shaft, on the north lode, it is 1 ft. wide, still producing rich stones of black and yellow copper ore. The new engine-shaft, on the south lode, is sunk about 9 fms.

SCORRIER CONSOLS.—J. Daniel, Dec. 30: Painter's engine-shaft is sunk to the 60, divided and cased completely for drawing from that level. Shaftmen are engaged in cutting pit; when this is completed we shall immediately commence cross-cutting to the south lode, and hope to meet with something good. The 45 cross-cut is extended north of Painter's engine-shaft 34 fms.; driving by four men, at 80¢ per fathom. The cross-cut south at this level is driven 35 fathoms from same shaft; anticipated cutting No. 1 lode in this drive, but have only 100 ft. of the lode, consequently we have suspended the driving for the present. The winze under the 45, on south lode, is sunk 7 fms.; lode for the depth from 2 to 3 feet wide, producing good stones of tin, with spots of ore, but not regular. The north cross-cut at the 30 is extended 11 fathoms from the whim-shaft, driving by three men and three boys, at 67¢. 6d. per fathom. We have set a winze to sink under the 30, to ventilate the 40 fm. level, set to six men, at 60¢ per fathom. We are getting on with the flat-rod for Highburrow shaft as fast as the weather will permit.

SILVER MOUNTAIN.—C. Williams, Dec. 29: We are pushing the cross-cut north towards the productive portion of the lode with all possible speed, and hope soon to be able to report having made a good discovery. I cannot observe much change in the strata since my last, with the exception of a little more water oozing from the end, which, I believe, is a good sign of a lode being near. In blue shale we have an excellent lode, being 12 ft. wide, consisting of slate, spar, gossan, and silver-lead ore, yielding of the latter about 26 cwts. per cubic fathom. I am pleased to say that the dressing of the ore is progressing very satisfactorily.

SILVER VEIN.—E. Burn, Jan. 1: During the past week the shaftmen have made fair progress in sinking. The ground is improved, and if it continues as at present I calculate to be down to the 30 in seven weeks more; the lode continues the same as last reported. In the 20 fm. level, north and south, we have intersected No. 2 east and west lode; it is about 1 ft. wide, composed principally of quartz. The lode in the present end is about 2 feet wide. All other points of operation are without alteration since my last report.

SMITH'S WOOD.—Wm. Hoaking, Dec. 30: The engine-shaft is down 2 fms. 2 ft. below the 24 fm. level; the progress in this direction, as will be seen by my last report, has been but little within the last month, in consequence of the usual and necessary work having been in hand, such as cutting pit at the 24 fm. level, wherein to lodge the stuff of deeper sinking, cutting ground for bearings and cisterns, and fixing the same, carrying down main rod, dropping the sinking lift, and sundry other work, essentially necessary to secure uninterrupted progress of sinking to the next level. All this preparatory work is, however, completed, and we are now in a position to rapidly increase our depth. With regard to the lode in the bottom of the shaft, it is 3 feet wide, and of a composition that convinces me we are on the eve of opening on a lasting deposit of ore; it is beautifully defined, between regular walls; and my conviction of the similarity of this to other rich mines, and that the result will assuredly be shortly in keeping is strengthened by every foot we sink. In conclusion I would observe that the work creating the heaviest of our cost, such as machinery, &c., is already executed, and that, consequently, our future cost and energy will be devoted to underground exploration only, which, for a short time more persevered with, I am positive, from experience of trials under similar geological circumstances, will result richly successful. Since writing my report yesterday, the men engaged taking down the lode to complete their bargain in the 24 fm. level, discovered a splendid leader of copper ore, over 4 inches wide, in the bottom of the end, specimens of which I have sent to the offices of the company this day.

SORTIDGE CONSOLS.—J. Richards, Jan. 1: In the 50, west of Mayne's cross-cut, on No. 2 south lode, the lode is 18 in. wide, of a very promising description, being composed of conical quartz, munda, peach, and ore, worth 1½ ton per fm. At the ventilating shaft the cutting of pit in the 50 is completed, and the shaft is being sunk below pump-pit, which will also be finished this week, the men will then be removed to drive a cross-cut south from the present 60 end west, there being, it is thought, more lode standing in this direction. In the 40 west, and west of Stancombe's cross-cut, on the south part of the main lode, the lode is 2 feet wide, consisting of quartz, munda, and a little ore. In the 40, west of John's cross-cut, on the south part of the main lode, the lode is 18 in. wide, and yields good stones of ore. In Gribbins's cross-cut north, in the 40 east, the ground continues favourable for progress. In the 30 west, on the main lode, the lode is 3 feet wide, composed of capel, munda, gossan, and stones of rich yellow and black oxide of copper ore. In Stancombe's rise, in the back of the 20, east of Jenkins's rise, the lode is 18 in. wide, and worth 1 ton of ore per fm.

SOUTH CARADON WHEAL HOPE.—Wm. C. Cook, Dec. 27: I have re-set the 90 cross-cut north at the former price, 15¢ per fm. The ground has become harder since my last report.

SOUTH CARN BREA.—T. Glanville, Dec. 31: In the flat-rod shaft the part of the lode sinking on is worth 30¢ per fm.

SOUTH CRENVEY.—E. Chegwin, Dec. 30: In the 124, driving east of flat-rod shaft, the lode is 2 ft. wide, producing 1½ ton of copper ore, worth about 8¢ per fm. In the 124, driving west of flat-rod shaft, the lode is 2 ft. wide, producing 1½ ton of ore, worth 7¢ per fm. In the 105, driving west of flat-rod shaft, the lode is 2 ft. wide, producing 1½ ton of ore, worth 3¢ per fm. Our tribute pitches are without change to notice.

SOUTH DAKEN.—J. Bandy, Saturday last being our monthly settling day, the following tributes were let:—The 80 to drive east from the engine-shaft by six men, at 15¢ per fathom; the lode at this point is 4 ft. wide, producing saving work, and presents a very promising appearance; the ground here is a little more favourable for progress. To stop in the back of the 80, east of shaft, by two men, at 63¢ per fathom; lode 2 feet wide, producing saving work. The 70 to drive east of shaft by six men, at 61¢. 15¢ per fathom; the lode is all the width of the end, composed of a nice clay-slate, carbonate of lime, with lead and copper ore disseminated throughout; and looking at the improved appearance of the ground here, I hope I shall soon be able to report a good discovery of lead ore. To stop the back of the 70 east by two men, at 63¢ per fathom; the lode is 3 feet wide, containing copper and lead ore; value of the latter 5 cwts. per fathom, and presenting a very kindly appearance. The 60 to drive east by six men, at 61¢. 10¢ per fathom; the lode at this point is very wide, and is much of the same character as in the 70. From present appearance there is every probability of an early improvement. The 50 to drive east by four men, at 61¢ per fm.; the lode 15 inches wide, composed of a light clay-slate, carbonate of lime, yielding good spots of lead ore, and is of a very promising character. In the 40 east we have not as yet met with any lode east of the cross-course. I have placed the men to drive south to see if we can meet with it in that direction; let to four men, at 61¢. 10¢ per fathom. The 30 to drive west, by four men, at 61¢ per fathom; the lode at this point is 5 ft. wide, composed of a beautiful clay-slate, sugar-spar, copper and lead ore; value of the latter from 12 to 14 cwts. per fm., and the general character of the lode at this point fully warrants us in expecting a considerable improvement soon. To sink a winze below the 20, west of air-shaft, the whole length to communicate with the 30, as per bargain, by four men, at 81¢. 10¢ per fathom. When this communication is effected, from present appearance it will, in my opinion, lay open a valuable piece of ground, that can be taken away at a profit to the shareholders. We continue to open on the lode met with below our pumping-wheel; it is composed of a light clay-slate and gossan. I have placed the men to drive a few feet more, and the lode is of a promising character. The weather of late has been unfavourable for surface work. The machinery and pitwork are in good working condition.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—W. Roberts, Dec. 31: At the flat-rod shaft the erection of capstan and shears is nearly completed, and to-day I think we shall begin to send down the pitwork. In the 50 east the lode is smaller than it has been, now 6 in. wide, producing good stones of ore.

SOUTH EXMOUTH.—J. P. Nicholas, Dec. 31: The west lode in the 45 north is opening out large, and yielding some fine stones of lead ore, presenting altogether favourable indications of its soon becoming valuable productive. The 45 south has been driven 10 fms. in, and the ground is again becoming more settled, and the lode forming up. The stop in the back of this level, north of rise, is yielding 1 ton of ore per fathom. The east lode, in the 45 north, is full 5 feet wide, consisting chiefly of barytes and white iron, with fine lead ore disseminated throughout, but not as yet in sufficient quantity to value. We have resumed driving the 30 south, but have not found the lode since it was hove out of its course by the slide crossing it. Nicholas's stop in the back of this level, north of cross-cut, has improved during the last few days, and is now yielding 1½ ton of ore per fathom. There is no alteration in any of the other stops worthy of notice. We have fixed the skip-road from surface to the 45, and are now driving with skips, which work admirably. We are preparing to sink a standing and sinking-lift at the 45, and on its being completed we shall be in a position to sink the shaft without let or hindrance.

SOUTH PHENIX.—J. Barkell, Dec. 31: The following is a statement of the work done in December, and the settling account for January, 1863:—The 166 has been driven west on the Greenhill lode 5 ft. 6 in., and re-set to drive by four men, at 15¢ per fm.; the lode is producing occasional stones of ore, and as there is a little more water issuing from it than usual I think it will shortly improve. The 154 has been driven west on this lode 5 ft., and re-set to drive by two men, at 81¢. 5¢ per fathom; the lode is about 2½ ft. wide, composed of quartz and peacock granite, and producing spots of copper ore and blende. The 126 has been driven south on the great cross-course 8 fms. 3 ft. 6 in., and re-set to drive by six men, at 31¢. 10¢ per fm.; the last 3 feet has been driven into another elvan course, and the little water that is percolating through this elvan is highly mineralised, having already fractured the side of the level in places with green carbonate of copper. We have now reached the point where I anticipated intersecting the Marko Valley lode, therefore I am daily anticipating to cut into it. The 100 has been driven south on this cross-course 4 ft. 3 in. only; this has been into a very hard and troublesome capel, but at present there is a great change of ground taking place; I have, therefore, not set to the men, but shall do so in a day or two.

SOUTH WHEAL GOLDS.—Dec. 31: Yours's Lode. The lode in Mitchell's engine-shaft, sinking below the 140 fm. level, is 15 inches wide—unproductive. The same remark will apply to the 140 west. The ground in the 140, east of Mitchell's, driving south, is rather harder than when last reported. The lode in the 130 west is 20 inches wide, yielding 3 tons of ore per fathom—a beautiful looking lode. In the 120 west the lode is 15 inches wide, producing occasional stones of ore. We have two stops working in the bottom of the 120 west, by twelve men, each stop producing 2½ tons of ore per fathom. The lode in the winze sinking in the bottom of the 120 west is 20 inches wide, yielding 3 tons of ore per fathom. In the 100 west the lode is 3 feet wide, yielding 4 tons of ore per fathom—a fine lode. The lode in the 100 west is small and poor. The stop in the bottom of the 100 west is yielding 2 tons of ore per fathom. In the 90 west the lode is small and unproductive. The lode in the 78 west is 15 inches wide—unproductive. South Lode: In the 130 east the lode is 3 feet wide, consisting of munda, spar, and peach, with occasional stones of ore. The lode in the 120 east is 2 feet wide, looking more promising than for some time past. In the 110 east the lode is 20 inches wide—unproductive. The lode in the 100 east is 2 feet wide, composed of spar and spots of ore, having a promising appearance. The stop in the bottom of the 100 east is yielding 4 tons of ore per fathom.

ST. DAVID'S (GOLD).—H. B. Farry, Dec. 29: I have employed four men to drive in the open cut, and they will be under way above the commencement of the next week. The appearance of the Elizabeth lode in the forebore is much the same as when I wrote you my last report, and still yielding a good lead. Both levels at Bwlchoc are cleared out. I have set two men to drive in the upper one. This lode is about 2 feet wide, and looks remarkably well to drive. Being at the bottom of the hill, we shall have very good backs.

ST. DAY UNITED.—F. Pryor, C. Oates, E. Ralph, J. Gilbert, Dec. 24: Our pay and settling day, and we have been busy. Set our regular tributes and tribute pitches. The principal features in this mine at this time are the two shafts sinking on the tin lode, Billing's and Ople's; the former is worth 45¢ per fathom, and the latter is worth 50¢.

per fathom. We calculate to sink about the same in this shaft as last month, being a little over 2 fms. We have laid open a large piece of tin ground in the western part of the mine from which we shall increase our returns, when we are in a position to return it. Other places much the same as for some time, but, on the whole, this mine never looked so well in the bottom.

ST. IVES WHEAL ALLEN.—H. Taylor, Dec. 24: At Roderick's engine-shaft, sinking below the 20, the lode is 7 in. wide, thin. In a winze sinking below the 20, east of Giesler's flat-rod shaft, the lode is 7 ft. wide, worth 10¢ per fm. In the 30, east of Giesler's shaft, the lode is 9 in. wide, worth from 12¢ to 14¢ per fm. On the Carbons lode, south of the adit, the lode is 2½ ft. wide, worth from 18¢ to 20¢ per fm. No other change to notice.

Henry Taylor, January 1: I beg to say that the new shaft sinking below the surface by nine men, at 19¢ per fm. The 30, east of Giesler's flat-rod shaft, driving by four men, at 16¢ per fm.; lode 9 in. wide, worth from 12¢ to 14¢ per fm. A winze sinking below the 20 by four men, at 10¢. 10¢ per fm.; lode 6 ft. wide, worth 9¢ per fm. The 20, east of Giesler's shaft, driving by four men, at 9¢ per fm.; lode 7 ft. wide, worth from 6¢ to 8¢ per fm. On the Carbons lode, south of the adit, driving by four men, at 11¢ per fm.; lode 2½ ft. wide, worth 18¢ per fm. Five tribute pitches, at 16¢. 11¢. 17¢.

ST. JUST UNITED.—J. Cartwright, Dec. 31: Since my last report we have dropped the lift in the engine-shaft to the 40 fm. level, below the deep adit, and hope by the end of next month to have the water in fork to this level, 90 fms. from surface. We are clearing up East Buck and shafts, under the 20 fm. level, below adit; as soon as we get down to this level we shall commence clearing them, where, from the reports I can gather, we shall discover a good lot of tribute ground. We are extending the deep adit (or 50 fm. level as it is called) both east and west in tin ground, which will pay very well to work on tribute. Without delay we shall put up a run of pulleys from the steam-whim to Oats's shaft, as we have an immense quantity of tinstuff at this shaft, and the carriage to the stamps is very easy. At the Red Dipper we are sinking the shaft by nine men, and expect next month to be down to the 80 fm. level, when we shall commence extending levels in tin ground both east and west; in extending west a very few fathoms we shall cut Wheel Owl lode; we shall then have four ends opening up tin ground at this level. We are clearing the 70 fm. level, east of this shaft, and sinking away a large quantity of tinstuff, left by the tin miners, which will pay well for stamping, and in clearing we are discovering a quantity of tin ground, which will pay well to work on tribute. The engine is doing its work admirably, forking the water and driving 48 heads of stamps. All our work is proceeding very satisfactorily.

TAMAR SILVER-LEAD.—T. Foote, Dec. 30: The ground in the 250 south is much the same for progress as when last reported. The lode in the 237 south is 2 feet wide, composed of quartz and lead, but nothing to value; the stop in the back of this level being poor is suspended. The 225 south is still in the unproductive ground; in the winze in bottom of this level the lode is 18 in. wide, producing saving work; there are four stops in the back of the level yielding as follows:—No. 1, 8 cwts.; No. 2, 20 cwts.; No. 3, 6 cwts.; and No. 4, 8 cwts. of lead per fm. The lode in the 215 south is 18 in. wide, yielding 5 cwts. of lead per fm., but the ground is hard; Tregoning's winze in this level is down 5 fms. 5 ft.; the lode is 2½ feet wide, and producing 7 cwts. of lead per fm.; there are three stops in this level, which will produce on an average 8 cwts. each of lead per fm. The stop in back of the 205 is worth 12 cwts. of lead per fm., and the stop in back of the 35 north is worth 6 cwts. of lead per fm.

TINCROFT.—W. Teague, Dec. 31: Highburrow Lode: In the 195, driving east and west of the engine-shaft, the lode is poor. In the 184, driving east of engine-shaft, the lode is improving in appearance as it gets clear away from the cross-course. In the 184, driving east of Martin's east shaft, the lode is worth for tin 20¢ per fathom. In the 184, driving west of Martin's east shaft, the lode at present is disordered by the cross-course, but in about 6 feet further driving we hope to get clear of the same, when there is every probability of the lode improving. Chappel's Lode: We have commenced to sink downright shaft under the 162, and the lode at present is unproductive. In the winze sinking under the 162 the lode is worth for tin 20¢ per fathom. We expect to take up the 180 from Cook's Kitchen boundary in the coming month, where the lode is reported to be worth full 40¢ per fathom; this level will be driven east to commence communicating with downright shaft, which is being sunk under the 162. Dunlop's Lode: In the 108, driving west of the cross-cut, the lode is producing saving work for tin and copper ore. The 53 is driving west of the winze, the lode is producing saving work for tin. In the 130, driving west of the rise, the lode is worth for tin 25¢ per fathom—a very kindly lode. In No. 1 winze, sinking under the 142, the lode is worth for tin 15¢ per fathom. In No. 2 winze, sinking under the 142, the lode is worth for tin 50¢ per fathom. There is nothing new in any other part of the mine.

TOLVADEN.—F. Gundry, Jan. 1: The engine-shaft is sunk 6 fms. 3 ft. below the 83, sinking by nine men, at 19¢ per fm. The 83 is driven east of cross-cut 5 fms.; at this point we are cross-cutting the lode, which is yielding stones of yellow ore, with every appearance of improving. We hope after driving 2 or 3 ft. more to the north to find a good lode. The 53 is driving west of the cross-cut, the lode is producing saving work. We have cross-cut the lode in two places; the first was through an ore lode; the second, which is about the present end, we have a course of ore yielding 4 tons per fm., worth from 30¢ to 35¢ per fm., and still improving. No. 1 winze is sunk below the 77 fm. level 2½ fms.; the lode continues its size, yielding 3½ tons per fm. The stopes in the back of this level are yielding from 2 to 2½ tons of ore per fm. We are driving four ends east of the engine-shaft, towards Wheel Down field—viz., the 83, 67, 60, and 50 fm. levels; the last 20 fms. in the 50 have been driven through ore ground at a tribute of 5¢. In the 60 east we have driven through 10 fms. of ore ground; the ground is a fine clay-slate, and the lode is worth for tin 40¢ per fathom. The 40 ground in the bottom of the adit Wheel Down field. Our opinion is that this ore will follow back the fookan, which we are now driving through in the 60; the bulk of the ore that was found in Trenow Consols made under this fookan. We are working nine pitches at an average tribute of 8¢. 8d. in 11¢. and from present prospects, we shortly expect to set pitches at 6¢. 8d. in 11¢. The recent change of ground throughout the mine is the most promising character.

TRELOWETH.—T. Richards, Jan. 1: In the engine-shaft there is no improvement. The ground in the 144 end, driving east, is not quite so hard. In the pump-winze sinking below the 134 the lode is worth 20¢ per fathom. The winze in the pump-winze is worth 14¢ per ft. The 134 end is worth 12¢ per fm. Stopes west of pump-winze are worth 9¢ per fm. Other places without much alteration. The tributes are breaking quite as much ore as for some time past.

TRESELYN AND SCADDICK.—Capt. Spargo, Dec. 31: The lode in the western level, on No. 2 tin and copper lode, is greatly improved since my last, and is now fully 2 feet wide; there is not a doubt in my mind but that it will continue gradually improving to the junction ground with the No. 1 lode, at which point we expect a far greater improvement. The lode in the eastern level is also, as last reported, gradually improving. All other parts of the mine are without material alteration, and the machinery two pitches set to eight men and two boys, at an average tribute of 10¢. 6d. in 17¢.

TREVENEN AND TREMENEERE.—J. Medien, W. Tippett, Dec. 17: Saturday being our settling-day, we set the following bargains:—Trevenen engine-shaft to sink below the 178, by eight men, at 23¢ per fm.; lode worth 20¢ per fm. A stop in the bottom of this level, east of shaft, by six men, at 51¢ per fm.; lode worth 18¢ per fm. The 170 end to drive west, by six men, at 41¢ per fm.; lode worth 9¢ per fm. A stop in the back, by four men, at 35¢ per fm.; lode worth 16¢ per fm. Trevenen winze-shaft to cut down below the 150, by six men and three boys, at 51¢ per fm. The 150 to clear west by four men and two boys, at 60¢ per fm.; this level yields a little saving work. Trevenen shaft to sink below the 150, by two men and two boys, at 41¢ per fm.; here the lode is disordered and poor at present. We also set to twenty-nine tributers, at an average tribute of 10¢. in 11¢.

Dec. 31: The summen have been engaged in the past week in cutting ground for bringing down skip-road, &c., consequently there is nothing done in the bottom of the shaft. The stop in the bottom of the 178 is worth 14¢ per fm. The 170 end is worth 8¢ per fm. The winze-shaft is nearly cut down to the 160. The lode has maintained its size and usual productiveness all the way down. The 150, west end, still yields a little tinstuff, which will pay for stamping. The stop in the back of the 170 west is worth 20¢ per fm. The tributes are without change since last report.

TREVENEN.—J. Scoble, Dec. 30: There is no alteration in the ground in the engine-shaft since our last week's report. The lode in the 30 south is 2 ft. wide, worth at present 4 cwts. of lead ore per fm. The lode in the stop in back of this level is 1 foot 6 in. wide, worth at present 4 cwts. of lead per fm. The lode in the winze sinking in the bottom of the 15 south is 2 ft. wide, worth at present 5 cwts. of lead per fm.

TRUMPET UNITED.—G. R. Odgers, Dec. 27: There is no material alteration in the engine-shaft, sinking below the 38, since my last report. The lode in the 38 west is in two parts; the south part is producing good tin; this, as we drive west, will make a junction with the north part, where we expect an improvement, and especially as this is only 4 fms. to the end of the point where the tin was found in the 16. The lode in the 25 west is small at present, but producing some good tin; this is only 4 fms. to the east, and where we found the tin in the 15, therefore we may reasonably look forward to an improvement here also. The lode in the stop above this place is producing some good tin, worth 5¢ per fm. The lode in the 15 west is worth 8¢ per fathom. The lode in the stop above the 15 is worth from 10¢ to 12¢ per fm.; this is a good lode. We are making as much progress as we possibly can with clearing up the flat-rod shaft.

Wheal Ann Lode: The lode in the 30 east is 6 in. wide, producing a little tin, and which I think will improve shortly. The pitch in the back of this level is producing some very good results.

TYDDYNGWADIS (SILVER-LEAD AND GOLD).—Capt. Williams, Dec. 29: In the adit cross-cut, in the forebore, we have four men driving 6 ft. 4 in.; I have no change here to mention. In the rises our progress in stopping is about 5 feet (two men); the ore continues much the same as last reported.—Cwmelwahan Isaf: In the adit cross-cut our progress in driving (six miners and one labourer) is 4 ft. 8 in.; ground hard.—No. 2 Bridge Lode: Our progress in driving here (six miners and one labourer) is 7 ft. 6 in.; the lode continues much the same in size and character, with specks of lead.

UNITED DOLFRYNGS (GOLD AND COPPER).—Capt. Williams, Dec. 29: West Dolfrwyng: At Bow Shaft six miners and three labourers are sinking, 3 ft. 7 in.; our progress is 1 ft. 6 in., and we expect to Christmas day.—North Dolfrwyng: Four men are driving on Harvey's lode, 5 ft.; ground easier, but no other change to notice.—Penryn Mine: Four men are driving on the lode 11 ft.—good prospects, and a fine lode.

VALE OF TOWY.—T. Harvey, Dec. 30: The lode in Clay's engine-shaft, sinking below the 110, is without any change since my last. The lode in the 70, north of Clay's, on Derrick lode, is 1½ ft. wide, unproductive at present, but I think it will improve as we get from the influence of the cross lode. The lode in the 60 north, on Derrick lode, is 3 ft. wide, as last reported, producing saving work for lead ore. The lode in the 60 north, on Derrick lode, is 3 ft. wide, with a large vugh in the bottom of the level, producing good work for lead ore. A box containing the specimen I send you per mail train this evening. The lode in the new adit level, south of Nant shaft, is 4 feet wide, producing good stones of lead ore, and the end presents a more favourable appearance than for some time past.

WEST BEAM.—Wm. Hoaking, Dec. 31: The men have just completed casting pit in the 35, at Parry's shaft, and are making rapid progress in clearing and securing the 35, west of same, in which we hope to open up some good tin ground. The lode in the bottom ends, at Hobson's shaft, continues very changeable in value, but as we extend out under the good shoals of tin gone down in the bottom of the next level above we expect to find it more settled and rich; and these points are but a few fathoms ahead of the western end we shall shortly reach them. We have suspended the bottom end east for the present, and put them to sink a winze in bottom of the 67 west, in which they have a good branch of tin, continuing, no doubt, through to the 78. The winze will effectively ventilate the bottom of the mine, and, to all appearance, lay open good tribute ground. The 55 fm. level end, west of Parry's shaft, is still being driven by four men, the lode in this is 2½ ft. wide, all of which is saving work for the stamps. The winze sinking in bottom of the shallow adit, on Union lode, in the eastern part of the mine, contains a lode 15 in. wide, producing rich tinwork, and is within 2 fms. of being communicated to a deep adit level, where, when completed, will, from its ventilation, enable us to put on several more tributers. Our tribute pitches throughout the mine are all looking just the same as usual. We have now 151 persons employed at the mine. We weighed our parcel of tin at Charlestown on the 24th inst: 10 tons 5 cwts. 2 qrs. 14 lbs. sold to Eathoven and Sons, at 67¢. 10¢. 6d. per ton, realising 694¢. 4s. 10d.

WEST PAR CONSOLS.—W. Woolcock, Jan. 1: In consequence of the main rod parting, and the bottom pole falling before we could fork, the water rose on more than 10 fms.; but during the last 24 hours we forked 3 fms., and without any more breakages or lets we shall soon fork again. We have been obliged to keep up all the underground men and machinery, &c., since the breakage, consequently there has been very little work underground for the past week. The lode in the 65 end, east of Dawke's, is still 2 ft.

wide, from which we have taken some good stones of tin—a very promising lode, and looking kindly for an early improvement. The lode in the rise above the 45, east of same shaft, is from 3 to 4 ft. wide, but still in a disordered state, with kilns intermixed, producing 2 cwts. of tin to the 100 sacks. The lode in the 45, east in 2½ ft. wide, composed of gossan, peach, and capel, producing a little tin on the south part, and some very rich copper ore in the gossan on the north part. We have completed the new eight-head stamps' axle, and put it up to-day. We cannot work the stamps connected with the engine since the breakage. These stamps being idle so long this month, I fear will interfere with the returns of tin next week.

WEST POLMEAR.—Rich. Hancock, Dec. 30: The engine-shaft is sunk 13 fms. 3 ft. below the 20, on the course of the north lode. During the last week the lode has produced good work for tin; at present it is not quite so good as it has been, but still produces some good stones of tin, and has a kindly appearance for improvement. No. 3 lode, in the end, is at present small and poor. We have taken the men who were at work in the end, and put them to drive north at the adit, to cut some other lodes further north. In about 40 fms. driving we shall intersect the first lode, some fathoms further north will all appearance cut another lode. We have found tin on the back of one, and have reason to believe there will be mineral found in these lodes when intersected.

WEST SHARP TOR.—Wm. Richards, Dec. 29: The part of the lode now being cut into in the cross-cut in the 162 east is blue capel, iron, and quartz, spotted with munda, and water issues as freely as before; there is no sign as yet of the north wall. The part of the lode now being cut into in the 20, 3 cross-cut, in the 162 west, is composed of iron, quartz, prisms, munda, a little copper ore, and green carbonate of copper; water issues very strongly from this point, which impedes the progress.

WEST WHEAL TREVELYAN.—G. R. Odgers, J. D. Osborne, Dec. 26: We have nearly completed the cutting down of Charles's shaft, and next week the men will commence fixing the flat-rod, &c., so as to resume the sinking below the 58, which will open out, according to present appearances, some ore ground. The 58 to drive south on the cross-course, by six men, at 41¢ per fathom; here we have 3¼ or 4 fathoms more to drive to cut the lode on the western side of the cross-course, which we hope will be found in another fortnight. Two stops in the back of the 58, west of Charles's shaft, by nine men, where there is a good lode in places, but which on an average is worth 7¢. 8¢ per fm. A stop in the bottom of the 45, east of Charles's shaft, by two men and one boy, at 27¢. 10¢ per fathom, where there is a kindly lode, and worth 67¢ per fathom.

—Pryor's Lode: We have set 3 fathoms east and 3 fathoms west of the cross-cut, by six men, at 41¢. 10¢ per fathom; lode full 2 feet wide, composed principally of quartz, with particles of munda. About 9 feet behind the lode we intersected a branch, which is letting out a quantity of water; this branch will fall into the lode in 9 feet, or 2 fathoms driving. The water is very much charged with iron, therefore we hope that as we open on this lode it will be found productive.

WHEAL AGAR.—Wm. Roberts, Dec. 31: The holidays intervening, the men have only just now got in regular course of working, so that there is scarcely any alteration to notice since last reported on.

WHEAL CREBOR.—Capt. Gifford, Jan. 2: We took down the lode at Cook's shaft to-day, which is 2½ ft. wide, composed of quartz, white iron, munda, and copper ore, yielding 2 tons of munda and 1 ton of copper ore per fm., in the west end of the shaft; the shaft is dipping east, and is already half-way over the shaft, and improving going down. The tributes are doing well, and the levels without alteration.

WHEAL EDWARD.—G. Rowe, Dec. 27: Our shaftmen are busily engaged in cutting tip-pit at the 92 fm. level, which is progressing satisfactorily. The lode in the 92 west is improving in character, and producing good stones of ore. The lode in the 81 west is 6 feet wide, worth 13¢ per fathom. At the 61 west there has been no lode taken down during the past week. The lode in the 50 west is not looking quite so well as when last reported on. There is no change to notice in any other point of operation. We are exceedingly busy in preparing for the sampling, which will be on Tuesday next, all being well.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Dec. 27: Setting Report: The 120 west to six men, at 41¢. 10¢ per fm., lode 18 in. wide, composed of quartz and prisms, with a little ore; this end is 8 fms. behind the point where the ore went down below the 110; there is a quantity of water coming from this end, hence we look upon this as very likely to end to good results as we get under the lode to measure 15 fathoms level. The 110 west to six men, at 41¢. 10¢ per fm.; lode 18 in. wide; in the back of the level there is a good branch of ore, opening tribute ground. In stripping down the north side of the 100 we find branches of spar, with black, grey, and yellow ore. The 90 west to four men, at 41¢. 10¢ per fm.; lode 20 in. wide, composed of spar, with ore, &c., intermixed. The 80 west to four men, at 31¢. 10¢ per fm.; lode producing full 2 tons per fm.; this is a good lode, and opening out some good ore ground. The 66 west to six men, at 71¢ per fm.; here the lode is small, but we have 18 fms. to drive to get under the slide that made the ore in the 80, 90, and 100, and which we are hurrying on as fast as possible, because we are of the opinion that as soon as we get under the slide we shall meet with similar results to those obtained at the bottom levels.—New Lode: The shaft to sink below the 80 by nine men, at 25¢ per fm., where there is a good lode for tin, worth between 30¢ and 40¢ per fm., and which, from appearances, is evidently opening out some good tin ground. The stop above the 80, east of cross-cut, to four men, at 41¢. 10¢ per fm., where the lode is large, and producing some good tin, worth full 15¢ per fm. The pitches are set at the usual tributes.

—G. R. Odgers, W. Bennetts, Jan. 1: The men are making as much speed as they possibly can with the driving of the 120 west. The lode in the 110 west is improving, yielding 1 ton of ore to the fathom. The 80 west will produce full 2 tons of good ore to the fathom. There is a lode in the winze sinking below the 80, on the new lode, worth from 30¢ to 40¢ per fathom.

WHEAL GRYLIS.—E. Rogers, J. Pope, Jan. 1: We cannot give you a full report this week, it being our survey to-morrow. The lode in different places has not been taken down, but I will give you a full and detailed account of the value of the ends next week.

WHEAL HARRIETT.—S. Williams, Dec. 27: The lode in the 115 fm. level end is producing good stones of tin, with good indications of a further improvement. The lode in the winze is worth for tin 60¢ per fm.; this winze is now down below the 100 fm. level 11 fms. 1 ft. 6 in.; at this point we shall drive the shaft down

at their respective mines. The chief feature of their accounts, besides their extreme simplicity and clearness, is the fact that they show a balance of cash in hand of upwards of 15,000*l.*, which is more than sufficient to pay the dividend recommended by the directors. The following are the sources from which the last half-year's earnings have been derived—viz., 10,629*l.* 1*s.* 1*d.* from Knockmahon Copper Mines, 3374*l.* 7*s.* 9*d.* from Luganure Lead Mines, 699*l.* 12*s.* 9*d.* from Ballycorra Lead Smelting Works, and 2073*l.* 9*s.* 6*d.* from Slievadagh Collieries. The company's expenditure includes—1084*l.* 6*s.* 9*d.* on Keeldrum Mines, 398*l.* 15*s.* 7*d.* on Lisnacollery, 538*l.* 7*s.* 7*d.* for interest, 450*l.* 9*s.* 6*d.* for income tax, 65*l.* 18*s.* 4*d.* for bad debts; leaving a net profit of 14,290*l.* 1*s.* 4*d.*, or 3090*l.* 1*s.* 4*d.* in excess of amount to be absorbed by the dividend. We have also before us the statement of accounts of the Carysfort Mining Company, made up to Oct. 31 last. In consequence of the repeated changes, not only of directors and managers, but also in the system of prosecuting the operations on the mines, which now begin to promise better for the future, this company's mining property may still be considered in its infancy, although upwards of 21,500*l.* has been spent upon it to this time (including 8000*l.* paid for the property). However, as the mines are decidedly in the best mining district of Ireland (the county Wicklow), and the company have yet more than 20,000*l.* at command by means of calls on cash, and securities now on hand, to the amount of 3275*l.* 13*s.* 7*d.*, there is every reasonable prospect that it will yet take a place among the dividend-paying mines, provided the proprietors are fortunate enough to have their affairs conducted with well-practised skill, and a due regard to economy, which is especially necessary where much has yet to be done ere a profitable state of working can be expected.

By economy we do not, however, mean merely an indiscriminate reduction of operations, which, on an extensive and promising mining property, would be most injudicious, but a reduction in fees and salaries, wherever it can be effected without pinching those officers who have capacity, and give their time and undivided attention to the legitimate working of the mines. The sum expended during the half-year referred to amounts to 1272*l.* 2*s.* 6*d.*, which comprises the following items:—234*l.* on Ballysillogue Mine; 314*l.* 9*s.* 4*d.* on Ballintemple Lead Mine, exclusive of 360*l.* 15*s.* received for lead ore; 290*l.* 18*s.* 4*d.* on Moneyteigue Mine; 132*l.* 7*s.* 5*d.* on gold royalties; and 295*l.* 7*s.* 5*d.* for salaries, &c., including remuneration to the directors at the rate of 300*l.* per annum. As already mentioned, the returns for the half-year amounted to 360*l.* 15*s.* for lead ore sold, which may, however, have produced something more. The prospects of the stopes at Ballintemple Lead Mine are good, and it is believed that about 200 tons of lead ore are laid open in that mine. The Mining Company of Ireland shares are now dealt in ex. div., and have been freely taken at 1*l.* 15*s.* Wicklow Copper have realised a further improvement of 5*s.* per share, and are in request at 3*l.* (5*s.* paid). That these shares have continued to command a very high premium through all the difficulties consequent on the American war is, besides the large resources in copper, chiefly attributable, as in the case of the Mining Company of Ireland, to the well-deserved confidence the public place in the directors and managers of the Wicklow Copper Mining Company. Connoisseurs shares are steady at 23*s.* General Mining Company for Ireland realised 5*l.* 5*s.* (4*s.* paid), and Carysfort, of both descriptions, were well sustained at last week's quotations. Castlewards made one quotation at 14*s.*

The limited liability company, with a capital of 40,000*l.*, in shares of 2*l.* 10*s.* each, now in course of formation for working the Tregurtha Downs and Owen Vean Consols sets, in the parishes of St. Hilary and Perranuthnoe, is progressing very favourably with its preliminary arrangements, and will be prominently brought before the public in next week's Journal. More numerous and varied testimony as to the value of the property has never been attached to any prospectus, and the circumstance of such firms as Messrs. Vivian, Grylls, Kendall, and Co.; Bolitho, Sons, and Co.; and Grylls, Hill, and Hill, in Cornwall; and Messrs. Dunsford and Ranken, in London, being amongst those officially connected with the company, should be a guarantee for success.

The following are the Government Returns of the exports of articles identified with mining, the produce and manufacture of Great Britain, for the eleven months ending Nov. 30, 1862; and also as compared with the eleven months ending Nov., 1861; extracted from the "Accounts relating to Trade and Navigation," published by the Board of Trade:—

DECLARED VALUE FOR THE ELEVEN MONTHS ENDING NOVEMBER 30.			
	1861.	1862.	Increase.
Coals and culm	£3,366,804	£3,462,783	£ 95,979
Hardware and cutlery	3,168,300	£3,023,752	144,548
Do. surgical instruments	254,602	254,602	—
Do. agricultural implements	396,711	3,675,065	516,865
Machinery:—			
Steam-engines	£1,116,917	1,483,278	366,361
Other sorts	2,749,551	3,866,468	1,116,917
Total	£10,391,272	£10,869,189	477,917
Metals:—Iron—Pig	£ 988,344	£1,128,886	140,542
Bar, bolt	2,043,422	2,043,422	—
Railway	2,762,122	2,594,792	167,330
Wire	138,594	284,288	145,694
Cast	184,675	308,167	123,492
Hoops	642,182	514,995	127,187
Wrought	779,571	936,330	156,759
Steel	1,868,762	2,070,445	201,683
Copper—Unwrought	404,679	468,311	63,632
Wrought, bars, &c.	296,692	1,800,854	1,504,162
Other sorts	248,904	1,950,175	1,701,271
Brass	152,671	189,448	36,777
Lead—Pig	398,913	554,299	155,386
Ore, litharge	323,523	436,209	112,686
Tin—Unwrought	817,821	1,138,769	320,948
Tin-plates	89,680	90,464	784
Grand total	£24,048,780	£26,594,454	£2,545,674
Less decrease—Machinery	185,127		
Total increase			£2,545,674

At the Redruth Ticking, on Thursday, 3156 tons of ore were sold, realising 17,505*l.* 3*s.* The particulars of sale were:—Average standard 126*l.* 2*s.*; average produce, 6*s.*; average price per ton, 5*l.* 12*s.*; quantity 17,505 tons, 207 tons 12 cwt. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore copper.
Dec. 4	3645	121 10 0	6 1/2	£4 17 6	879 16 0
" 11	2273	118 7 0	7 1/2	5 19 6	81 0 0
" 18	5078	126 10 0	6	4 16 0	80 16 0
" 24	2893	125 10 0	6 1/2	5 3 0	81 19 0
Jan. 1	3156	126 2 0	6 1/2	5 12 0	84 6 0

Compared with last week's sale the advance has been in the standard 2*l.*, and in the price per ton of ore about 2*s.* 6*d.* Compared with the corresponding sale of last month the advance has been in the standard 5*l.*, and in the price per ton of ore about 6*s.*

At the East Pool Mine meeting, on Tuesday, the accounts for the three months ending December showed a credit balance of 739*l.* 7*s.* 9*d.* A dividend of 640*l.* (5*s.* per share) was declared, and 99*l.* 7*s.* 9*d.* carried to credit of next account.

At Bedford United Mines meeting, on Dec. 24, the accounts for the three months ending Oct. showed a credit balance of 1292*l.* 9*s.* 3*d.* A dividend of 500*l.* (2*s.* 6*d.* per share) was declared, and 792*l.* 9*s.* 3*d.* carried to credit of next account. Capt. Wolferstan and Phillips reported upon the various points of operation.

At the Pendean Consols Mine meeting, on Tuesday (Mr. W. Bowden in the chair), the accounts for October and November showed a profit of 206*l.* 2*s.* 4*d.* The assets exceeded the liabilities by 1219*l.* Details in another column.

At the Great Wheal Busy meeting, on Thursday (Dr. Mathew in the chair), the accounts for the three months ending October showed a debit balance of 3760*l.* A call of 10*s.* per share was made. Details in another column.

At the Nanglies Mine meeting, on Dec. 22, the accounts showed a debit balance of 1057*l.* 18*s.* 6*d.* A call of 30*s.* per share was made. Captains J. Rowe and E. Dower reported that "The costs for the present quarter will be much less than formerly, and having copper to work on our returns will considerably increase. We cannot sell any muddle; we have 70 tons at surface, and when a market comes we can send up considerable quantities."

At the South Conduw Mine meeting, on Dec. 23, the accounts for the four months, ending with costs for November, showed a debit balance of 564*l.* 18*s.* 6*d.* The report of the agents stated that they had been induced to recommend the removal of the plant from the north to the south lode, because the north lode, three in number, are (below the adit) underlying south very rapidly, and the south lode (four in number) were about vertical. The agents recommended the engine to be fixed on the West Basset lode, near the main adit cross-course, so that by sinking on the lode they would be always near the north lode, and by being near the cross-course they could very speedily intersect the lode on either side of it, by driving on the said cross-course. They estimated that to remove the plant, and complete a new engine-shaft to the deep adit level, would cost about 700*l.* A report from Captain W. Roberts was read, which stated that, having gone to the cost of sinking the shaft 15 fms. below the 50, he thought it would be advisable to open some fathoms on the lode, east and west, before deciding on suspending operations altogether in this part of the mine; this could be done while the agents were fixing on a spot and preparing an engine-shaft further west and south. He believed the most promising part of the set was about north from Wheal Grenville engine-shaft. A call of 2*s.* per share was made. The committee of management were re-elected.

At East Providence Mine meeting, on Dec. 22, the accounts for the three months ending October showed a debit balance of 70*l.* 18*s.* 3*d.* A call of 2*s.* per share was made. Capt. T. Uren reported that the total ground opened on tatwork for the three months is 26 fms. 2 f. There are twenty-four persons employed underground and at surface, and the pitwork and machinery are in excellent order. They are carrying on the mine with all possible dispatch.

At New South Caradon Mine meeting, on Dec. 19 (Mr. W. G. Nettie in the chair), the accounts for the five months ending October showed a debit balance of 137*l.* 3*s.* 8*d.* A call of 1*s.* 6*d.* per share was made. Capt. H. Knapp reported that until within the last two months their time and money had been principally employed in excavating dead work. This has been got through, and a wide field is now fairly before them for exploring and developing the lodes, with fair and reasonable chances of success.

At the Wheal Vyyan meeting, on Dec. 22 (Mr. J. W. Johns in the chair), the accounts showed a debit balance of 1665*l.* 12*s.* 6*d.* A call of 30*s.* per share was made. Capt. Hampton and Nicholls reported upon the various points of operation. They have 81 hands employed.

At Hington Down Consols Mine meeting, on Dec. 4 (the Rev. C. J. F. Clinton in the chair), the accounts for Sept. and October showed a credit balance of 219*l.* 16*s.* 1*d.*, but the estimate of receipts and expenditure before the next meeting showed a balance against the mine of 166*l.* 3*s.* 4*d.* A call of 1*s.* per share was made. Capt. T. Richards reported that the prospects of the mine were more cheering than for some months past. The next sampling will be from 380 to 390 tons, and the costs for the ensuing two months about 1700*l.*

From Dolcoath Mine the sales of mineral during October were 994 tons of tin, averaging 66*l.* 9*s.* per ton, and realising 66,057*l.* 12*s.* 11*d.*; 1818*l.* 9*s.* 4*d.* worth of copper; and 162*l.* 6*s.* worth of arsenic. The shareholders received 45*s.* per share in dividends.

The Australian Mining Association (Burra Barra Mine) half-yearly meeting took place at the offices of the company, in Adelaide, on Oct. 15. The report submitted by the directors showed that the ore raised during the half-year was 4429 tons, of an estimated produce of 22 per cent. This had been taken from the workings not extending below the 55 fms. level. The accounts of the association from Sept. 30, 1861, to March 31, 1862, have now been closed, and show that 4909 tons of ore raised during that period realised 89,210*l.* 16*s.* 10*d.*, or 11*l.* 18*s.* 10*d.* per ton, leaving a profit of 10,572*l.* 13*s.* 4*d.*. This is 5*s.* 3*d.* per ton more of profit than was realised for the produce of the previous half-year, and the result would have been still more favourable had not the price of copper receded considerably. The total profit of the mine for the last six months, including rents and fees, amount to 11,842*l.* 11*s.* 6*d.* The credit balance of the company's profit and loss account up to the 31st of March last is 11,594*l.* 13*s.* 3*d.*. To this is to be added the estimated profit of the ore raised during the past six months, which is 9232*l.* 14*s.* 7*d.*, making a total balance of profit of 20,827*l.* 10*s.* 10*d.* available for division amongst the shareholders. Out of this the directors propose to pay a dividend of 5*s.* per share on the 18th inst., which will be the fifth dividend. The pitches in the higher levels are, according to the captain's report, looking exceedingly well. The quantity of ore on hand at the mines on Sept. 30 was 3217 tons, in addition to between 5 and 6 tons of refined copper.

LEEDS, JAN. 1.—In Mining Shares business has been quiet during the past week, and prices continue depressed in most descriptions of stock.

WHELFORD LEAD MINING COMPANY (LIMITED).—An improvement has taken place in Craig's dump, and in the cross-cut driving north the level forced, both of which are producing a fair quantity of ore, and continue to improve. About 20 blings of ore are already got.—JOHN GLEDHILL AND CO.

Creditors of the Rockall Fishing, Fish Oil, and Fish Manure Company (Limited) are required to forward the particulars of their claims by the 17th inst. to Mr. Francis Whinney, the provisional liquidator. Vice-Chancellor Wood has charge of the case, and Tuesday, February 17, is appointed for hearing and adjudicating upon the claims.

From Chili, we learn that the silver mines of Copiapo, Chanarillo, and Tres Puntas continued to yield an abundant product of rich metals of a high ley. Copper was recovering its former position in the market, in consequence of the rise of its value in foreign ports.

COPPER MINING IN LAKE SUPERIOR.—Calculations are beginning to be made as to the probable yield of the Lake Superior Copper Mines in 1862. The quantity of ore raised will, it is considered, show a falling off; but it is anticipated that the increased percentage will prove sufficient to compensate. The yield of ingot copper for 1862 will, probably, be slightly under 6000 tons; the Quincy, Minnesota, Cliff, and Pawable, followed by the National and Rockland Companies, supplying the whole quantity.

At the French Academy of Sciences, M. Pisani described a new variety of black spinell, recently discovered by Dr. Francfort in the copper mines of Miggliandone (Piedmont). This mineral is octohedral, of a black hue, with a conchoidal fracture, and composed of 58 per cent. of alumina, nearly 23 of oxide of zinc, 14 of protoxide of iron, 4 of magnesia, and a little silica and peroxide of iron.

EAST CARADON MINING COMPANY.—In next week's Journal we shall give a detailed report of the proceedings at the meeting of adventurers, to be held at Salisbury on Wednesday next.

THE ORIGIN AND PROGRESS OF MINING IN THE CARADON AND LISKEARD DISTRICTS.—Under this title Messrs. WEBB and GRACE, of Finch-lane and the Stock Exchange, have just published a very excellent manual for shareholders in East Cornwall mines. Scarcely 50 years having elapsed since the wealth of the Caradon district began to develop itself, the district must be regarded as new in comparison with Cornish mines generally; yet it must be admitted that ample has been done to invest the locality with interest. The separate details of the several sets being prefaced and elucidated by a sketch of the mines, and a geological map of the district, it will be apparent that the work will be an invaluable book of reference, both to existing shareholders and to those who intend investing in the districts. With regard to the details themselves, they appear to have been arranged with the greatest care, and as the names of the officers, the position of the financial affairs, and the latest reports upon the mines are all given, it is difficult to conceive what further information can be desired. The entire book is well worthy of perusal.

NEW PHASE IN THE COAL TRADE.—MONTHLY SALES BY AUCTION.—We are informed that some of the American coalowners have adopted the very novel idea of monthly sales by auction. The sale is made altogether unreserved, and the highest bidder will be the purchaser—no bid whatever being made by, or on behalf of, the company. Amongst the conditions of sale it is stated that "fifty cents per ton in bankable funds are to be paid at the time and place of sale, and the balance in like funds, on receiving the order for the coal, which must be called for within 10 days thereafter, and the coal taken away within 30 days from the day of sale, upon the condition that the other conditions of sale will be substantially those hitherto acted upon in the case of sales by private contract." The conditions are to be modified to meet the wants of ocean steamers, whose arrival cannot be precisely fixed.

GEOLOGISTS' ASSOCIATION.—On Monday is the anniversary meeting for the election of officers, at which Mr. C. Carter Blake will read a paper on the "Fossil Animals of South America."

MANCHESTER GEOLOGICAL SOCIETY.—A meeting of members was held on Tuesday, at the Museum, Peter-street, Mr. Andrew Knowles in the chair. A paper, by Mr. F. S. Bland, "On the carboniferous rocks in the neighbourhood of Shap and Crosby Ravensworth, with a section of that series on the northern and eastern extremities of the Lake District," was read by Mr. E. W. Binney. The author of the paper enumerated, at some length, the different strata to be found in the region specified, and also gave an outline of the positions they occupied, and of the forces which had been at work to produce the phenomena observable.—On the proposition of Mr. Atkinson, seconded by Mr. Wilkinson, votes of thanks were passed to Mr. Bland for his paper, and to Mr. Binney for reading it.—In the course of the discussion which followed, Mr. Joseph Dickinson, the President, expressed a desire for the publication of the valuable map and section sent by Mr. Bland with his paper.—Mr. Atkinson said that, no doubt, the map would be published in the course of the Government Geological Survey.—Mr. Binney said he was afraid that most of them would be dead, if they waited for the information through that source.—Mr. Dickinson said that the geological surveys were dependent a great deal upon local sources for their information, and this map and section would be very valuable to them.—The question of the publication of the map on a reduced scale was referred to the Council of the Society.—A vote of thanks was passed to the Chairman, and the proceedings terminated.

BRAY'S TRACTION-ENGINE.—During the past week a series of experiments have been made at Woolwich Dockyard before the principal officials with a view to test the efficiency of a new traction-engine, manufactured especially for dockyard work. The machine is at once a traction-engine, a steam derrick, and a portable steam-engine, and cannot, therefore, fail to prove economic in use. The total weight of the engine, boiler, and appliances complete is but 12 tons, and the pressure of steam which can be used is 120 lbs. The cylinder is 7 in. in diameter, and of short stroke, and the efficiency of the whole machine was really remarkable—a boiler of 28 tons weight being moved about with the greatest facility by the use of the truck, whilst the derrick proved itself capable of raising between 2 and 3 tons with ease. It was shown that 10 miles per hour could be attained either on hard or soft ground; and Mr. Louttit, the secretary of Bray's Traction-Engine Company, estimates that there will be a saving of 80 per cent. as compared with the manual and horse labour usually employed.

We understand that the directors of the Australian Mining Company have presented their late secretary, Mr. Edward Walford, with a handsome timepiece, as "a token of their personal regard, and a proof of their appreciation of his services during a space of nearly nine years."

M. Diethenbacher, by forming a mixture of one part of iodine with 400 parts of sulphur, has obtained a substance which possesses an extraordinary elasticity, lasting many hours, and even days. The mixture has a metallic brilliancy, and has been found very useful in taking impressions, since it reproduces the minutest details.

Gold is found along the whole extent of Nova Scotia, from Yarmouth to Cape Cansuau, and in many places in the interior.—Nova Scotia paper.

To Directors, Solicitors, Secretaries, &c.

IMPORTANT TO ALL CONNECTED WITH PUBLIC COMPANIES.—Now ready, price 2*s.* 6*d.*, A HANDY BOOK OF WHAT TO DO AND HOW TO DO IT, IN ORDER TO FORM ANY MERCANTILE, MINING, AND OTHER JOINT-STOCK COMPANIES. Designed as a PRACTICAL GUIDE for Projectors, Promoters, Directors, Shareholders, Creditors, Solicitors, Secretaries, and other officers. By THOMAS TAPPING, Esq., of the Middle Temple, Barrister-at-Law. London: Published at the Mining Journal office, 26, Fleet-street, E.C., and to be had of all booksellers and newsmen.

MANAGER WANTED.—A PUBLIC COMPANY, carrying on a manufacturing business in London, REQUIRES a MANAGER of intelligence and EXPERIENCE in matters connected with BUILDING and IRONWORK, as well as in the SUPERINTENDENCE of WORKS and WORKMEN. He will be required to take the general management under the control of the directors, and be thoroughly acquainted with making up estimates and accounts. Residence provided upon the premises.—Apply by letter only, stating salary, addressed to Mr. ENKOWNS, 32, Fleet-street, Falcon-court, E.C.

A GENTLEMAN of large experience in the manufacture of iron, and good knowledge of mining operations, is DESIROUS of a SITUATION as MANAGER of an IRONWORK. Good references can be given.—Address, "F. Q.," MINING JOURNAL office, 26, Fleet-street, London, E.C.

TO SMELTERS, MANUFACTURERS, &c.—A GENTLEMAN of MANY YEARS' EXPERIENCE in the MANAGEMENT of EXTENSIVE LEAD WORKS, is OPEN to an ENGAGEMENT. £500 can be advanced, and first-class references given.—Address, "C. M.," 166, Fleet-street, London, E.C.

TO COAL OWNERS AND COLLIERY PROPRIETORS.—Having had upwards of 30 years' experience (extending over most part of the South Wales basin) in the management, ventilation, surveying, and opening of extensive coal and ironstone mines, I beg to OFFER such SERVICES to any party who may require them as a PERIODICAL VIEWER.—W. BEDLINGTON, Whitechurch, Cardiff.

TO COLLIERY PROPRIETORS AND OTHERS.—FOR SALE, cheap (or any portion of it), a SECOND-HAND CHARCOAL WIRE ROPE, in excellent condition, suitable for an incline. Size, 5 1/2 inches in circumference; length, 6000 yards.—Address, "H. A.," care of Mr. Henry Greenwood, advertising agent, Liverpool.

TO RAILWAY AND CANAL COMPANIES.—A GENTLEMAN having been ENGAGED on the PRINCIPAL CANALS in SHROPSHIRE for upwards of 25 years, as MANAGER and COLLECTOR of TOLLS, WISHES for a SIMILAR APPOINTMENT, in consequence of one of the canals being converted for railway purposes. Security given, and the most unexceptionable references.—Address, Mr. JOHN HEWITT, Oaken Gates, Shropshire.

HINDOSTAN (SINGBHOOM) COPPER COMPANY (LIMITED).—ONE HUNDRED SHARES FOR SALE, with £2 10*s.* per share paid. FIFTY SHARES WANTED in the EAST INDIA COAL COMPANY.—Apply to Messrs. GRIEVE and Co., 9, Liverpool-street, New Broad-street, E.C.

THE WEST PAR CONSOLS.—This mine adjoins, and is on the same lode as, Par Consols, which has yielded large returns, out of which the profits divided have been about £250,000, and is still paying dividends. There are also other mines adjoining, and in the immediate neighbourhood, which have been very rich and profitable.

It is stated that at present the richest part of Par Consols is only about 35 fms. from West Par boundary. At West Par upwards of £9000 worth of tin and copper ore has been sold, chiefly from the 45, and if the 55 and 65 had been equally productive the mine would, ere this, have paid well.

Capt. Puckey, of Par Consols (the adjoining rich mine), reports, that "although the lode in the 65 has hitherto been poor, yet it is of a marvellous size, and knowing the character of the lode to be precisely the same as the tin lode in the adjoining mine Par Consols, I do not hesitate again to say the mine will not be fairly tried before it is sunk so as to prove the lode at deeper levels; as the 60 in Par Consols was one of the poorest, while the 70 and 80 were two of the richest levels we had for tin in that mine." Capt. Charles Thomas, of Dolcoath, gives the same advice, remarking, "Many lodes of great value have had partial failures, and by deeper workings have been found of greater value than before."

The deepest level is the 65 fms. from surface, and the shaft is about to be sunk as rapidly as possible 15 fms. deeper, where there are good grounds for expecting the lode richer than it has been found yet. In the meantime the returns meet a large portion of the labour cost.

In the last eight months the returns have realised about £950, and they have increased lately.

There are about 19,000 shares, on which 3*s.* per share is paid up. Mr. Chorr's recommends an immediate investment at the present nominal price, and is prepared to do business in the shares.—1, Finch-lane, E.C., Jan. 1, 1863.

LEAD ORES.

Mines.	Tons.	Price per ton.	Purchasers.
Sold on the 30th December.			
Iale of Man Mining Company	100	£15 7 0	Panther Co.
ditto (chats)	30	11 0 0	Newton, Keates, & Co.
Brondfloy	60	14 1 0	Stins, Williams, & Co.

BLACK TIN.

Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
Sold on the 20th December.				
Gt. Wh. Fortune ..	27 5 1 23	£1922	2 10	Williams & Co.
Sold on the 24th December.				
So. Carn Brea ..	4 3 3 18	60 10 0	253 16	Blascoe Co.
ditto	4 6 0 0	60 12 6	260 13	Carvedras.
West Beam	10 5 2 14	67 10 0	694 4	10—Enthoven & Sons.
Sold on the 27th December.				
Drake Walls ..	20 10 0	£1368	2 6	—
Sold on the 30th December.				
Great Wh. Busy ..	19 1 0 3	1104 19	9	—
Tincroft	10 13 3 9	64 0 0	684 5	0—Williams & Co.
ditto	10 0 0 0	64 0 0	640 0	0—Bolitho & Sons.
ditto	4 0 0 0	64 0 0	256 0	0—Blascoe Co.

COPPER ORES.

Sampled Dec. 17, and sold at Tabb's Hotel, Redruth, Jan. 1.					
Mines.	Tons.	Price.	Mines.	Tons.	Price.
Clifford Amalgamated ..	102	£5 15 0	South Frances	50	£3 0 0
ditto	100	6 5 0	ditto	22	11 7 0
ditto	29	6 5 0	East Pool	83	4 14 6
ditto	98	6 5 0	ditto	64	4 9 6
ditto	74	4 0 0	ditto	41	4 10 6
ditto	71	5 1 0	Tolcarne	46	5 3 0
ditto	70	5 13 0	ditto	44	3 5 6
ditto	65	5 10 6	ditto	38	2 15 6
ditto	64	5 0 0	ditto	36	6 3 0
ditto	60	3 14 6	North Bosken	52	11 16 6
ditto	51	3 11 6	ditto	27	6 0 6
West Seton	113	2 18 6	ditto	26	2 7 6
ditto	102	8 2 6	Pendarves	24	4 0 0
ditto	71	6 16 6	Bassett	23	4 7 6
ditto	64	5 15 6	Wheel Bassett	52	5 2 6
ditto	59	4 19 6	ditto	49	5 0 0
ditto	58	5 10 0	ditto	25	5 14 0
ditto	55	2 19 0	ditto	17	7 14 0
ditto	28	8 2 6	East Bassett	36	6 11 6
South Tolgus	69	4 2 6	ditto	33	5 6 6
ditto	68	4 18 6	ditto	32	6 2 6
ditto	60	5 4 6	Wheel Harriett	35	3 4 6
ditto	53	7 6 6	ditto	26	6 1 6
ditto	12	1 12 6	West Stray Park	59	6 17 0
Wheel Seton	37	4 12 6	West Tolgus	49	5 4 6
ditto	5	2 19 6	Bampfylde	48	13 11 0
Pendarves	73	4 2 6	North Crofty	36	6 17 6
ditto	45	14 0 0	North Croft	26	5 2 6
ditto	40	5 0 0	ditto	3	0 0 0
ditto	10	13 15 0	Wheel Kitty	15	7 17 0
South Frances	74	5 1 6	East Tolgus	7	4 10 0
ditto	55	6 13 6			

THE CROWN AND WENDRON TIN AND COPPER MINING COMPANY (LIMITED).

Capital £2000, in shares of £1 each. 2s. 6d. per share to be paid on allotment, and the remainder in calls according to the order of the directors, at intervals of not less than three months.

DIRECTORS.
 THOMAS SCHOLEFIELD, Esq., the Ivy House, Leeds.
 SAMUEL HEY, Esq., Albion-place, Leeds.
 JOHN BRAY, Esq., Hill House, Sowerthorpe, near Leeds.
 JOHN BINGLEY, Esq., Headingley, Leeds.
 BENJAMIN IDLE, Esq., Meadow-road, Leeds.
 JOHN BROWNELL, Esq., Briggate, Leeds.
 SAMUEL HIDE, Esq., Dewsbury-road, Leeds.
 Messrs. William Williams Brown and Co., Leeds.
SOLICITOR—John Blackburn, Leeds.

OFFICES OF THE COMPANY.—63, ALBION STREET, LEEDS.

This company has been formed for the purpose of working certain mining ground situated in the parishes of Crown and Wendron, in the county of Cornwall, which has already been opened to a depth of 50 fms., with sufficient engine power to work it.

On the north of it are the celebrated mines of Camborne, on the south the ancient tin workings of Wendron, on the west the far-famed Abraham and Crenner Mines, and the eastern boundary is near Basset and Grylls and Wendron Consols Mines. The strata in each of these mines are identical with those found in this ground.

The master copper lode in this site is a continuation of the same lode which proved so rich in Crenner; the same line of tin lodes from the west run through it, and the whole forms an extensive tract, traversed by many lodes of a very important and promising character, requiring only the outlay of a moderate capital, with judicious management.

Detailed prospectuses, with forms of application for shares, may be obtained of the solicitor.

THE CAPE OF GOOD HOPE COPPER MINING COMPANY (LIMITED).

To be incorporated under the Companies Act, 1862.
 Capital £150,000, in 15,000 shares of £10 each.

Deposit on application £1 per share, and on allotment a further payment of £1 per share. Calls not to exceed £2 per share, at intervals of three months.

DIRECTORS.
 WILLIAM BEVAN, Esq. (Messrs. Wm. Bird and Co.), 2, Laurence Pountney-hill.
 F. G. VAN DER BYL, Esq. (Messrs. Van der Byl and Co., Cape Town), 3, Upper Hyde Park-gardens.
 OSGOOD HANBURY, Jun., Esq. (Messrs. Hanbury and Lloyd), 60, Lombard-street.
 EDWARD JENNER JERRARD, Esq. (Messrs. Wm. Vennings and Co.), 12, Pancras.
 WILLIAM KEATES, Esq. (Messrs. Newton, Keates, and Co.), Liverpool.
 JOHN KING, Esq. (Messrs. Phillips, King, and Co.), Fowkes-buildings, Tower-street.
 EDMUND A. PONTIFF, Esq. (Messrs. Pontiff and Wood), Farringdon Works.
 JOHN TAYLOR, Jun., Esq., 6, Queen-street-place.
 RICHARD TAYLOR, Esq., 6, Queen-street-place.

AUDITORS—James Anderson, Esq., 20, New Bridge-street; Robert Henty, Esq., 40, Brunel-square, Brighton.

BANKERS—Messrs. Hanbury and Lloyd, 60, Lombard-street, E.C.

SOLICITORS—Messrs. John and William Galsworthy, 12, Old Jewry Chambers.

MANAGERS.
 Messrs. John Taylor and Sons, 6, Queen-street-place, Upper Thames-street.
 MANAGERS AT THE CAPE OF GOOD HOPE—Henry Steele, Esq.

BROKERS—Messrs. Higgins, Harrison, and Co., 21, Threadneedle-street.

SECRETARY—W. Vernon Venables, Esq.

OFFICES—4, QUEEN STREET PLACE, UPPER THAMES STREET, LONDON.

This company is formed for the purpose of acquiring by purchase, from Messrs. Phillips, King, and Co., the present proprietors, large tracts of land in the district of Namaqualand, Cape of Good Hope, with the extensive copper mines thereon, and continuing the working of the said mines.

The property consists of the following estates of freehold tenure, subject to the payment of a small annual quit rent to the colonial Government, the total amount of which does not exceed £50 per annum:—

Springbok Fontein (Koper Berg) 42,920 acres.
 Ookiep (Grootfontein) 4,435
 Nababeep (Lelykapad) 35,240
 Modder Fontein 16,660
 Danze Kraal 13,600
 Keerom 32,842
 A moiety of Wildepaarde Hoek 9,386
 Obos 15,077
 Reit Hula (Rodeklip Huelve) 30,730

Total 202,940 acres.
 Together with certain freehold buildings, sites in Rodeklip and Kobbie Bays, the shipping ports of the province, as also the remaining period of six years of a Crown lease of Sprakel (Wheat Maria), and the mineral rights of the Farm Dikgat.

These properties have been in the possession of the above-named firm for nine years, and mining during that period has been carried on with very remunerative results, but a division of interests consequent upon the demise of two of the partners renders it necessary that the property should be sold.

The estates were purchased for the sum of £11,286, at a time when the property was of far less value in the Cape Colony than it is at present, and the buildings at the mines and stations, including a jetty 400 ft. in length at Rodeklip Bay, have cost £17,892.

A portion of the buildings at Springbok, consisting of school, magistrate's offices, &c., are let to the Government for £200 per annum, and other buildings are let for above £400 per annum; but these, and small portions of land adjoining, are about to be offered for sale by auction, and the proceeds will be received by the company.

Mining operations have been carried on by the present proprietors since 1853, and their sales of ores at Swansburg have been as follows:—

Tons.	Realizing
In 1853 78	£ 2,829
In 1854 351	12,719
In 1855 1008	30,608
In 1856 1739	42,873
In 1857 2334	70,012
In 1858 2829	78,330
In 1859 2958	83,574
In 1860 3077	81,621
In 1861 1977	47,421
*To October, 1862 2648	65,708

Total 18,999 £515,792
 Or £27 3s. per ton, a far higher average than that of any other mines in the world, and yielding a profit of upwards of £115,000.

The mines at present being worked are Ookiep and Wheat Maria, but other large deposits of rich ores are known to exist upon the estates mentioned, which, it is believed, only need a small outlay to become as productive mines as any yet opened.

The concern is in full working order, and the yield of ores, averaging 30 per cent., has been during the first half of the present year 1453 tons, whilst the month of July shows a return of 241 tons, and August of 278 tons.

The quantities of ore sold at Swansburg, and the returns given above, represent, however, only a portion of the actual extraction from the mines, as in consequence of the cost of inland (or wagon) transport, and the limited extent to which it has been procurable, all ore under 16 per cent. have hitherto been put aside.

The directors, having regard to the results obtained, and the bona fide character of the undertaking, have agreed with the proprietors for the purchase of the entire properties and rights on the following terms:—

The landed estates to be taken at the cost price—say, £11,286, and the buildings at £14,000 (£2832 being deducted from the original cost for depreciation). The sums amounting to £25,286, to be payable on possession being given.

The movable property, consisting of trading stock, mining machinery, materials, and tools, animals for transport and slaughter, wagons, boats, and stores of every description, to be taken at the maximum price of £23,000 (the amount at which it was valued in the inventories of December last), subject, however, to a re-valuation when the company takes possession, and to any abatement that may be necessary. Of this sum the owners have agreed to take as part payment £15,000 in shares.

The consideration for the mineral rights and advantages which the estates possess, as well as for the large accumulations of inferior ores now at the mines, is fixed at £15,000, to be taken by the owners in paid-up shares, deliverable to them at the expiration of 12 months after possession is obtained.

The above arrangements will leave nearly £77,000 for the working and development of the concern, an amount deemed ample for the purpose.

An agreement has been made with the owners for taking over the stocks of marketable ores which are in the country on the 1st of January, 1863, and also those which may be mined from that time until the company acquires possession, upon terms which will leave a profit to the company.

The directors of the company, desiring to give the fullest possible development to the mineral resources of the property, and being under the conviction that the outlay of a sum necessary for the construction of a tramway over about 16 miles of the most sandy part of the road, will have the effect of increasing the present carrying power, and lowering its cost considerably, propose commencing this work forthwith. They will follow this by the erection of works for the reduction and concentration of the inferior ores, and as these have accumulated to an enormous extent, and can be raised in large quantities, it is believed that the returns will thus be very largely increased.

Specimens of ores may be seen, and prospectuses obtained, at the offices of the company.

Application for shares to be made to the directors, and sent to the secretary, at the offices of the company, No. 4, Queen-street-place, E.C., or to Messrs. HIGGINS, HARRISON, and Co., brokers of the company; but no application will be considered unless a deposit of £1 for each share applied for shall have been previously made with the bankers of the company. The sum will be returned in full in the event of no allotment being made.

P.S.—At date of the last advices, Nov. 14, the mines were yielding well, and 2400 tons of ore were on the beach, a large portion of which will come under the arrangements made between the vendors and the company.

* Since this statement was compiled the Croydon has arrived at Swansburg, with 410 tons of ore, worth about £12,900.

THE CAPE OF GOOD HOPE COPPER MINING COMPANY (LIMITED).

The LAST DAY FOR RECEIVING APPLICATIONS FOR SHARES in this company is SATURDAY, the 10th January.

By order of the Board, W. VERNON VENABLES, Secy.

4, Queen-street-place, Upper Thames-street, London, E.C.

TO ADVENTURERS IN FOREIGN MINES.—MR. HARRY

THOMAS VERRAN, of PLACENTIA, NEWFOUNDLAND, who has had considerable experience (under the tuition of his father, and in connection with many other experienced Mining Engineers) is ready to UNDERTAKE THE EXAMINATION AND REPORTING upon MINERAL PROPERTIES in Newfoundland, the United States, or any other country, where his services may prove useful to capitalists. The greatest confidence may be placed in Mr. VERRAN, who will use his best judgment in giving reliable information to those who may repose confidence in him.

THE PROGRESS OF MINING IN 1861.

BEING THE EIGHTEENTH ANNUAL REVIEW.

By J. Y. WATSON, F.G.S., Author of the *Compendium of British Mining* (published in 1843), *Gleanings among Mines and Minerals*, &c.

The SEVENTEENTH ANNUAL REVIEW of MINING PROGRESS appeared in the *Mining Journal* of December 29, 1860, and January 5, 1861.

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Teacher of Practical Mining in the late Mining School of Cornwall, and Principal of the Engineering Academy, 36, Upper Parliament-street, Liverpool.

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A CAUTIOUS MAN.—Many speculators in mines having written

to the writer of the letters signed "A Cautious Man," asking him if it would be agreeable to him to transact their mining business for them, and to give them information when he has, by his inspecting agents, fixed on a good mine to speculate in, informs them, and the public generally, that he will have no objection to act as a broker for them in any mines he may recommend, but in no others.

He has taken offices in the City, and will be happy to see any clients who may favour him with their mining business.

He will with pleasure give his opinion to parties holding shares in British mines, as to the advisability of keeping or disposing of their stock.

Those speculators who may entrust him with their business may rest assured that he will make purchases for them in none but good mines, such, in short, as the most experienced mining inspectors in Cornwall would acknowledge to be good. The bulk of calling mines (with but few exceptions), and the trash, he will leave to others to speculate in.

By his system, and by following his advice, he is confident much money may be made in mining. "A Cautious Man" will get most mines in Cornwall inspected by a truthful and experienced agent for two guineas each. One inspection frequently saves hundreds of pounds.—Address, Mr. HALSE, No. 2, Copthall Chambers, Throgmorton-street, London.

Bankers: The Metropolitan and Provincial Bank.

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FINANCIAL AND ENGINEERING CONTRACTS.

Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

SOUTH GORLAND.—In your notice, in last week's Journal, of a meeting of the adventurers in South Gorland Mine, you report the speech of a Mr. Pike. I beg to say that I am not the person referred to. I am inclined to state this simply because I have received letters asking questions about the mine, and as I am neither interested in or acquainted with it, I desire to spare unnecessary trouble to parties seeking information respecting the concern in question.—R. H. PIKE: Camborne.

POOR COPPER ORES.—The process and apparatus for extracting copper from pyrites of low percentage, described by Mr. Carl Wetz, in the *Berg-und Hüttenmännische Zeitung*, in April, 1862, will be found fully reported upon in the *Mining Journal* of 1867. The English patent, which has long since lapsed, from non-payment of the three-year fees, was taken out by Mr. Lozano, in 1857; and, with regard to its working in Norway, it was alluded to in Phillips and Darlington's "Records of Mining and Metallurgy," published about 1858, where it is called Sinding's process. Dr. Lamborn, whose work on Metallurgy was published two or three years since, and reviewed in the *Mining Journal*, mentions that the Professor at Freiberg tried the system of precipitation with sulphuretted hydrogen, and pronounced it to result, under ordinary circumstances, in complete failure. Mr. Sinding's temporary success may be considered to have arisen from some unknown and accidental circumstance.

GREAT WHEAL ALFRED.—Can anyone furnish us with information as to the above unfortunate adventure? I am a shareholder, and the reply to my enquiries at the office has been for a long time precisely the same—"A division of the assets may be expected shortly." Surely, now that nearly, if not quite, two years have elapsed since the resolution to wind-up was passed, the shareholders ought to be made acquainted with the proceedings of the liquidators.—E. P. K.

MINING COMPANIES AT LEEDS.—Will you kindly permit me space in your valuable Journal to request the Leeds shareholders to insert in their weekly reports the ruling prices of the various local and other mines which have been launched in that town. There is the Wheal Prudence, Cornubia, Brea Consols, Hebbel Moor, and many others, which are owned mainly by Leeds adventurers; and many interested parties, to my knowledge, are regular subscribers to the Journal for the purpose of obtaining such information on these matters as otherwise they can only have by direct application to the brokers, which is sometimes annoying. Their usual kindness encourages me to hope that they will supply this lack through your columns. The Brea Consols has been before the public five years, more or less, and the information the adventurers have concerning it is of the most scant description. Till your edition of last Saturday, we have heard nothing for the last three months. As this fact has caused some shareholders to lose heart, the agents would do well to send their reports regularly, as at first. The mine is considered a fine and promising property, and only requires, like all undertakings of the same kind, energy and patience to place it on the list of dividend mines.—AN ADVENTURER.

RE-REGISTRATION OF PUBLIC COMPANIES.—Query: A limited liability company, registered in Jan., 1862, does the new Act require it again to register?—CONFIRMED.—[The company must (under Clause 150) register under the Companies Act, 1862, as an existing one, but (by Clause 159) no fees will be payable upon such re-registration.]

COPPER.—There should not be more than 2 per mille between sulphur, antimony, and arsenic; not more than 6 per mille between lead and iron, and not more than 1 per cent. of heterogeneous substances. Please state the quality of copper that would, as near as possible, answer this description.—A. SUMNER.—[A good "rough cake" copper would probably be pure enough to compete with copper of the quality indicated above, which, however, is nearly equal to "best selected."]

THE LEAD TRADE.—"A. V." (Paris).—The lead bearing the brand of "WB" can be purchased through any London metal broker; as, for example, through Messrs. Felly, Boyle, and Co., of Allhallows-chambers, Lombard-street; Messrs. Von Dadelzen and North, Leadenhall-street, &c. "A. V." will find a full list of metal brokers in the London Directory.

"A Sufferer" must have been under a strange delusion when he penned the letter he forwarded to us for publication. We have made particular enquiry into the matter of which he complains, and find that he is wrong in his premises and conclusions. The district is celebrated for its success, and the mine itself one of the best managed, and likely to rank among the most prosperous. The communication of "A Sufferer" shows the necessity of personal enquiry of those from whom correct information can be obtained, rather than forming erroneous opinions from the prejudiced remarks of evil-disposed persons. Shareholders should apply at the offices of those mines in which they are interested for information before addressing us on imaginary grievances, which easily-procured information would very frequently render nugatory and entirely dispel.

THE MINING JOURNAL.

Railway and Commercial Gazette.

LONDON, JANUARY 3, 1863.

A decrease in our exports during the 11 months, ending Nov. 30, is shown by the returns from the Board of Trade, as compared with the corresponding period of the previous year. The total declared value for 1862 is 113,280,779*l.*, against 115,355,004*l.* in 1861,—a difference of 2,074,225*l.*, which, considering the almost complete cessation of business in some branches of our shipping trade, through the state of the cotton market, is of no material moment, and is evidence, indeed, of the extraordinary extent to which the exports would have been carried during the present year, if all classes of our industry had been in their usually full vigour.

The metal trade demonstrates this very clearly, for, notwithstanding the deficiency in the general balance, the excess of exports of metal, and their manufactures, is greater than during the 11 months of 1861, by 2,545,674*l.*, a sum larger, by nearly half a million, of the gross falling off in the aggregate of all branches. The total, during 1862, is given at 26,954,454*l.*, and in 1861 it was 24,048,780*l.* Under one head only is the aggregate less than in the previous year—in machinery—to the extent of only 135,127*l.*; indeed, "steam-engines" give an increase, being 1,438,278*l.* in 1862, and 1,146,917*l.* in 1861, but "other sorts" is 2,248,063*l.*, against 2,749,551*l.*, and hence the deficiency. In iron there is an excess of 723,517*l.* over 1861; in hardware, 516,865*l.*; in copper, 464,618*l.*; in tin-plates, 320,948*l.*; in lead, 320,709*l.*; in tin, unwrought, 112,686*l.*; in coals, 96,179*l.*; in steel, 87,718*l.*; in brass, 36,777*l.*; and in zinc, 784*l.*

The balance of trade in the precious metals is in our favour for the eleven months of 1862, when the total value of gold and silver imports amounted to 29,122,537*l.*, while our exports were 26,564,875*l.*, being an excess of 2,557,662*l.* The former consisted of 18,119,151*l.* in gold, and 11,003,386*l.* in silver; and the latter of 14,594,840*l.* in gold, and 11,970,035*l.* in silver. We shipped to Egypt, in transit to India and China, 11,076,743*l.*; to France, 6,636,285*l.*; and to other countries in proportion to the usual interchange of business. From the United States we received 8,875,091*l.*; from Mexico and South America, 7,172,150*l.*; from Australia, 6,308,000*l.*; from France, 2,200,870*l.*; from Holland, 1,857,267*l.*; and so on in smaller sums from the other places, but as we shall soon have the statement for the entire twelve months, it is not necessary to enter more into detail as to the trade in bullion and specie with these respective places.

THE NOVA SCOTIA GOLD AND LAND COMPANY (Limited) have applied

to the Committee of the Stock Exchange for a settling day, in respect of their first issue of 30,000 shares. The directors have ordered three additional steam-engines, with crushers and amalgamators, which are to be sent out at the earliest moment.

We mentioned in last week's Journal, that some strong observations had been made in one of the colonial papers in reference to the colonial directors. We have since felt it our duty, as having in some measure the high position of protectorate over mining enterprises in which English capital is invested, to make some enquiries into the affairs of this company, and we are quite satisfied of the bona fides of this undertaking, and that the company really possess the properties and machinery announced.

Messrs. PHILLIPS and DARLINGTON have both been to the

tion, and that in obedience to it he has exerted himself for so many years so zealously as he has done in the task of providing that instruction which we believe the miner himself earnestly desires. In conveying his request to us that we would endeavour to remove the wrong impression conveyed by the critique of the "Working Miner," Mr. HUNT also remarks: "Your correspondent appears to suppose I put myself forward as a teacher. I pray you dispossess his mind of that idea. I feel that I have everything to learn; that notwithstanding all that has been written on the laws regulating the distribution of minerals in the Earth, we are all of us 'groping like the blind Cyclops,' and that while the guesses of the philosopher frequently lead us away from the truth, we cannot feel that the speculations of the most practiced miner have yet interpreted the words which Nature has written on her tables of stone."

ON WORKING COAL.

THE "LONG WALL" V. "PILLAR AND STALL."

The highly interesting paper upon this subject by Mr. J. GOODWIN, read before the Manchester Geological Society, was published in a Supplement to the *Mining Journal* of Nov. 29, and the discussion which followed was of so valuable a nature that we now propose to give an abstract of it. Mr. Thomas Knowles doubted the accuracy of Mr. Goodwin's statement that there was 5 per cent. loss by the use of the pillar and stall; in reply to which Mr. Goodwin referred to cases where even with careful management the loss had amounted to 10 per cent. Mr. Knowles did not think 10,000 tons on the pillar and stall system gave Mr. Goodwin an opportunity of judging. There was a wonderful difference between excavating 10,000 tons of solid coal, and working out 5000 or 6000 tons in wide work, where there would be such a weight that there would be a tendency to crush it. Mr. Goodwin said that in working they build a packing on each side of the wagon-road, varying in width from 6 ft. to 3 yards, as the nature of the work might require. They make a wagon-road the same as on the pillar and stall system, and the only difficulty he had experienced was from the creep of the floor. The packing kept the whole roof. He referred to an instance where the packing kept 300 yards on the line of level, and 150 yards on the rise and dip, but he had known the workings to extend 1400 yards of rank, or width, from the rise to the dip of the workings. In thanking Mr. Goodwin for bringing the subject before the meeting, Mr. Binney said—

"I have no doubt there will be more advocates for the pillar and stall system in Lancashire than the long wall. Nevertheless, I am glad to see that Mr. Goodwin does come forward and say something in favour of long wall working. If the Lancashire gentlemen went into North Derbyshire probably they would find a great many advocates of the long wall system, and they would see advantages there which they do not see in Lancashire. The same remark will apply to the East of Scotland. I have a great idea myself that the different systems of long wall and pillar and stall workings will have advantages in particular districts. I think in Derbyshire, where the long wall system has been going on for 150 or 200 years, the men are so thoroughly drilled to it, and work it so scientifically, that its results would hardly be fair as applied to you. You would doubtless be a very long time in Lancashire in getting your men to work so well as it as they do in Derbyshire. On the other hand, and on the same principle, you would have a difficulty in introducing the pillar and stall system into Derbyshire. In Scotland they all use the former, and they say they can get a great more coal by it. I have a little colliery of my own there, and I want to use the long wall, and I have no other system. They imposed upon me the necessity of doing this, although I would willingly be allowed a choice. What I saw in Derbyshire, and what I see now, is that they certainly get cheaper and larger coal than in Lancashire. There may be peculiarities in the field, and in the nature of the roof, which give them some advantage; but I think it is not impossible that there may be many seams of coal in Lancashire which the long wall would work with success."

Mr. Knowles contended that in Lancashire they got their coals, as a rule, considerably cheaper per ton than in Derbyshire, where they adopt the long wall system; but Mr. Binney thought the Derbyshire people would decidedly object to that statement. In reply to a question from Mr. Knowles, Mr. Goodwin said he did not ventilate the goaf, and that there was not the slightest danger from gas, in consequence. Mr. Knowles had only had one fatal accident in 15 years, yet worked pillar and stall. Mr. Binney remarked, however, that in the neighbourhood of Wigan there had been a good many accidents, and continued—

"If you take the long wall system in Derbyshire and Scotland you will find that they have never had such accidents as with the pillar and stall system generally.—Mr. F. Higson (Government Inspector): The best proof that can be given of the merits of the long wall system is that there are several mines in Lancashire now worked on the long wall system with profit, which could not be worked at all with the pillar and stall system. There are also many others in Wales.—Mr. Joseph Dickinson (Government Inspector) said it was evident that the preponderating feeling amongst the viewers of Lancashire, as far as represented by the meeting, was in favour of the pillar and stall system. I myself was brought up in the North of England, and I thought then there was nothing like the pillar and stall system. During the last 22 years I have been constantly more or less in districts where the long wall system has been followed, and I find that the advantages of that system have grown upon me year after year, and it is now many years ago since I arrived at the conclusion that of the two systems the long wall is incomparably the better. It possesses many advantages; and although Mr. Thomas Knowles may have given us the result of his experience at Wigan, where he has carried on some mines in the most successful manner, I do not think we should be led away from the advantages of the long wall system simply because he by means of the other is able to produce equally beneficial results. In Lancashire the best methods may be said to be a combination of the pillar and stall system and long wall. Pillar and stall, for as driving to the extremity of the boundary is concerned, and then bringing the coal back by long wall, or semi-long wall, and pillar and stall. There are places where the waste is not only more than 5 per cent., but I know of my own knowledge that there is actually in thick and tender seams in South Wales one-half of some of the best steam coal in this country being left in the ground, crushed, spoiled, and irretrievably lost. That is by pillar and stall work, whilst in the same colliery I have taken comparative results of the coal got by the long wall system, and I can state that almost the whole of the coal was obtained, and scarcely any lost. These points to which Mr. Goodwin has alluded may appear different to those who have not really gone practically into the subject of the long wall, especially what was called his new theory of taking down the roof to make room for the wagon-way to lift. There are many long wall collieries where it is decidedly the better way not to cut the bottom at all. Cut down the roof until you have all your ground settled about you, and you will soon have as permanently settled a road as if it had been cut into the solid coal. I have seen this over and over again; and if you will go into some of the mines in Shropshire, where long wall is universally practised, you will see what I mean. There is no other system practised there. In South Staffordshire there is scarcely any other system, except in the 10 yard coal, which is worked to a great extent by pillar and stall, and in a most wasteful way. In some parts of Derbyshire, like the Clayton Colliery, at Manchester, for instance, you will see long wall carried out successfully; and it appears that at Clayton Mr. Goodwin has noticed the very same thing which I have noticed in other places. In Scotland, most of the ironstone and coal mines are conducted upon the long wall system, and we all know that no men go more minutely into the matter of £ s. d. than Scotchmen. Mr. Binney tells you that there he is actually compelled to work his colliery long wall work. I have myself seen thick seams in the South of France worked by the long wall system. I have there seen a seam 80 ft. thick worked in this way. It may be easier to work a thin mine long wall work, but it is not impossible to work thick mines long wall, and I believe quite as successfully as working them the other way. Mr. Goodwin's paper touches on many other points, all of which have a most important bearing. In the long wall the ventilation is carried exactly where it is wanted, whereas in the pillar and stall you are dependent upon cut-throughs, bratticing, or other methods, all less certain. With regard to the question of safety, I have never seen any comparative results of the number of accidents as arising from the two systems, but I believe if they were compared together you would find that the result is considerably in favour of the long wall. In Scotland the number of accidents is exceedingly small, as compared with our own accidents. In Derbyshire accidents are few; in Shropshire few. In South Staffordshire they are more numerous, but that is because of the thick coal worked on the pillar and stall system. I believe, if you take the whole country round, you will find that the waste in pillar and stall working—that is, where the pillar and stall, and not a combination of the two, is practised, as in Lancashire—you will find that the waste is very great, that a larger proportion of small coal is produced, and that a large proportion of very valuable mineral is lost, of which sooner or later this country will feel the ill effects. We are working very fast over some valuable seams. In large tracts all over the country they are being rapidly removed. The best seams at shallow depths are fast going away. I believe that the long wall system was introduced into the Manchester district by the late Mr. Bradbury, several years ago. He was a gentleman conversant with both systems, and had mines in Staffordshire worked by the long wall system. He saw the advantage of that system as compared with the other, and he introduced it here. I am glad to find that Mr. Goodwin has extended it into the Peasecock Mine. There are several other points upon which I would like to touch, but our time is too limited.—Mr. F. Higson: I have seen on a large scale the long wall system carried out almost to perfection. I have seen on a similar scale the long wall well carried out in the neighbourhood of Wigan, in the present day. In the yard coal, in the canal, and in other thin seams, the system has been carried out quite successfully; while it failed elsewhere, although tried by the same people. They failed from the fact that there was an overwhelming weight in the place, thereby crushing the coal into small. With regard to these two systems, as shown on the plans, they are now carried out in two collieries in my district side by side. There is one under the arrangement of a north country viewer. The quantity of small is equal in both, while that gives the larger outlet which provides more working places for the men."

Mr. Knowles still contending that there was no occasion to lose 5 per cent. in any mine, Mr. Binney suggested that he (Mr. Knowles) should give them a paper on the advantages of the system pursued at Wigan. Mr. Farrimond had never seen 5 per cent. loss in pillar and stall working. With regard to small, he considered it often resulted from the use of the pick. Mr. Higson thought all must admit that clean working is in favour of the long wall system. Mr. Goodwin considered that with regard to the safety of the workmen they were safer with the long wall system, because there is no breaking down of the works. In conclusion, Mr. Joseph Dickinson (the President) said—

"We have many mines in this country, for instance the Cannel about Blackrod, and also many thin seams, which are worked long wall; whereas they were once worked on the pillar and stall system. All that narrow work is now saved; and it is only about a month ago since I had one of the large coal owners of South Wales seeing me, and he has some of the most extensive and the deepest steam coal mines in the Aberdare district. He wished to introduce the long wall system; so satisfied is he of the advantages it possesses over the old pillar and stall system. But in South Wales they are not only proposing, but now in some cases are actually working on the long wall system. Pos-

sibly the heading of this paper, "Long Wall v. Pillar and Stall," has something to do with the antagonism set up against it. I do not see that there is any antagonism existing between the two systems. The long wall system is adapted to a great number of seams. Through the whole of Belgium to depth of 940 yards there is no other system followed. In that country the engineers, from the results of practice and consultation, have come to the conclusion that it is the system, and, therefore, they adopt it. And we also are gradually introducing more of the same system, which has been the system of some of our collieries from time immemorial. I believe there is a little loss of coal generally in working the Lancashire coal mines as there is to be met with in any district, but that is owing to the combination of these two systems."

CANNEL COAL, AND ITS USES.

Although it cannot be doubted that Cannel coal possesses many advantages as compared with ordinary coal, the uses to which Cannel is turned are very limited, its application being almost entirely confined to gas making, and even for this purpose it is seldom used, except under extraordinary circumstances, such, for instance, as an unusual draw upon the gas, or a temporary scarcity of hands. Provided, however, Cannel coal could be supplied at about the same price as best bituminous, there can be no doubt that it would invariably have the preference. Deposits of Cannel are found in Scotland, near Wigan, and in North Wales; the first-named supplying the principal portion consumed, and being undoubtedly of the finest quality. The great value of Cannel coal, as a gas-making material, arises from the enormous yield of pure gas obtained from it, as compared with ordinary bituminous coal. As a shipping coal, Cannel is, perhaps, the best that can be chosen; it is so hard and large that it can be delivered at a distant port in almost as good a condition as at half a mile from the pit's mouth, and it also possesses the advantage that it can be kept in stock without becoming comparatively worthless, as ordinary coal does. Comparing Cannel with bituminous coal, it is found in practice that the former yields 25 per cent. more gas, and that with Cannel gas purification is almost unnecessary. The advantage of shipping the Cannel coal for foreign gas-works will, consequently, be at once apparent.

But it is not alone for export that the Cannel coal enjoys so high a reputation even at Birmingham, which is absolutely situated upon a rich coal field. It is found that Cannel which has to bear land carriage from Wigan can, in many instances, be advantageously substituted, from the fact that the caking coal usually yields only 8000 ft. of gas, which requires considerable purification, whilst the Wigan Cannel often gives 12,000 ft. This Cannel has been analysed by Mr. Leigh, the consulting chemist to the Manchester Corporation Gas Works, and, as has already been stated in the *Mining Journal*, the following results were obtained:—

Carbonic oxide and aqueous vapour	1.63
Olefant gas and divers hydro-carbon	8.50
Atmospheric air	4.32
Nitrogen	0.19
Hydrogen	40.30
Light carburetted hydrogen	33.83
Carbonic acid	11.35=100.02

The Scotch and Leeswood (North Wales) Cannels give even better results than this, and it is probable that from the latter place especially a sufficient quantity could be obtained to ensure a large annual profit upon a capital of (say) 100,000*l.*, to anyone developing the deposit with care and energy. The Cannel coal trade is one which has been comparatively little developed, but, at the same time, one which could be almost unlimitedly extended, so that those engaging in it may look forward with confidence to success.

COLLIERY EXPLOSIONS AND "SENSATION" LETTERS.

[FROM A CORRESPONDENT.]

Whenever an alarming colliery accident occurs there seems to arise a by far too general feeling that somebody, no matter whom, should be convicted of "manslaughter" at least, or "Wilful Murder" by preference; yet but few of the outside public pay the slightest regard to the precise details of any particular case. Their argument is that so many persons have been killed, and therefore somebody should be criminally convicted. What satisfaction can it afford to these spasmodic philanthropists to know that the coalowner has taken every pains to appoint those whom he considers competent men to the several responsible offices in the colliery? How can they understand that the men, being accustomed to the mine, have no more dread of a fatal calamity than the citizen of London has of being killed by the fall of the house he is passing? How can they be expected to learn that the pecuniary loss to the coalowner is so great when he is unfortunate enough to have a great accident that the amount would often suffice to pay all the viewers in the district? Let these gentlemen depend upon it that no one is more ready than the coalowner to adopt improvements as soon as they are proved to be such, but he is unwilling to countenance the wild schemes of those who have probably never seen a coal pit in their lives. Every colliery calamity brings forward a whole host of inventors, who declare that had their inventions been adopted the accident could not have occurred. This is probably true in the particular case, but the coalowner could prove in twenty words that the remedy would be ten times worse than the disease, and that, although the particular accident might not have occurred, ten others, each more alarming than that avoided, would have been made inevitable. The compulsory use of safety-lamps in all cases might be introduced, and it might also be enacted that blasting with gunpowder should never be permitted; but beyond this, the judgment of those working the colliery is the only protection which the workmen can hope to have beyond what the present law gives them.

THE EDMUND'S MAIN EXPLOSION.

[FROM A CORRESPONDENT.]

It has ever been the principle of the *Mining Journal* to advocate all modifications in the system of working collieries calculated to increase the safety of the workman, and to render his occupation more healthful; the reason for the course being that the working collier is less able to help himself than the coalowner, but we are by no means inclined to agree with such extreme opinions as those expressed by the dissentient jurymen at Edmund's Main.—Mr. Edward Parker—in his letter published in the *Times* of yesterday morning. We opine that the expression of such views as those of Mr. Parker are calculated rather to prevent the introduction of safer systems of working than otherwise; and, upon the evidence we have been able to collect, we are unwilling to charge coroners and Government Inspectors with conspiracy to shield the coalowners, and to permit the sacrifice of the lives of their workmen with impunity. We are aware that Mr. Morton is less popular than some of his colleagues, and that it is the opinion of many of the working men that he is better fitted for a high civic position in York or London than for that he occupies, but that he is practically acquainted with colliery working, and exerts himself to prevent casualties in the collieries committed to his charge, is not, we think, doubted.

As a reason for his protest against the verdict, Mr. Parker states that it was "proved that the men received their orders from George Lawton, who was assisted by his son who was responsible for the management of the pit, who gave George Lawton his instructions, and what these instructions were?" This was the main object of the inquest, if it had any object at all. And further on he remarks that "if George Lawton was the person responsible for blasting the coal with gunpowder in that fiery bog-dale, let him bear the blame, and let it be added to the heavy penalty he has already paid, but until that missing link of evidence is supplied I will not believe him guilty. I first knew George Lawton when he escaped the fatal blast which took place at the Oaks in 1847. He was illiterate, but trustworthy and resolute, and has ever proved himself a faithful servant. The wages he received at the time of his death were 30*s.* a week and his house, and as he had the Swale Colliery to attend to, where he had superintended the sinking of the shaft, these statements appear sufficiently commendatory, but not so when they are carefully examined. That Lawton had the underground management of the pit is proved by the uncontradicted evidence, upon oath, of Mr. Mitchell, jun., that he had such management. We, fortunately, perhaps, also knew George Lawton; and although he was certainly not an educated man, there was certainly no want of intelligence in him, and he was decidedly more than equal to many underwriters whom we have met with in the pits both of Yorkshire and in the North. We admit that 30*s.* a house is a small salary for any man in a responsible position, but we must not lose sight of the fact that many of our London merchants do not pay their clerks who correspond in three languages a higher wage, and that no one thinks of calculating that he pays 2*d.* per day per letter written, or 1*s.* 8*d.* per day per language spoken. George Lawton was a man who possessed much intelligence, combined with a life-long practical experience; and we must admit that we would rather trust our life to such a man than to one who had received a collegiate education, but had no experience.

Another ground of complaint to which Mr. Parker alludes is, that the coroner did not record the opinion of a collier, that it was not safe to use naked lights and blast with gunpowder; yet we certainly think that the opinion was quite immaterial, the explosion itself having demonstrated both that the use of naked lights and the practice of blasting with gunpowder were not only dangerous, but that no one should undoubtedly be recorded, if it were only to prove that good ventilation does not invariably secure freedom from explosion, and to refute the notion very generally entertained among practical men, that the use of safety-lamps adds to the danger of colliery working, because they induce neglect to ventilate. With respect to the verdict itself, Mr. Parker states that the coroner read over the verdict, and gave his immediate approval to the first part of it, in which the jury "are unable to attach blame to any single individual," and then set to work with all the zeal of an advocate to persuade the jury to leave out the opinion they expressed, "that the cause of the explosion was owing to the incautious and unsafe working of the dip-bord of this colliery; the mode of blasting with powder there the jury consider to have been highly injudicious and dangerous, and feel sure that it ought not to have been allowed by the underviewer or prosecuted by the workmen."

Now, although the coroner may have taken unnecessary trouble to induce the jury to

leave out their opinion, and confine themselves to the precise finding, we cannot think that it was with any wish to screen the owners of the colliery. The fact of finding that they "are unable to attach blame to any single individual," is sufficiently reflective upon all connected with the management, and we believe that such a letter as that of Mr. Parker would never have been published, but from the circumstance that the word *single* was omitted by most of the newspapers in reporting the verdict, and that an excellent cause of complaint was consequently permitted to exist.

REPORT FROM NORTHUMBERLAND AND DURHAM.

JAN. 1.—The notices referred to lately as given as the Steam Coal Colliery of Northumberland expire to-day. The notices of time, indeed, expired a few days ago, the men at the Backworth Colliery having ceased work nearly a fortnight ago, on the expiration of their time. The long-continued depression has caused the owners to propose a reduction at all those collieries in the prices paid for hewing and putting coals, &c. The men do not appear to object to a slight reduction. But another proposition has been made by the owners—that is, the re-introduction of a yearly bond, which has been discontinued about 18 years. To this the men appear to have a decided objection, and they appear to prefer the monthly agreement lately in force. But, at any rate the men would have objected to a yearly bond at the present moment. If it were to be discussed at the old time for entering into those agreements—viz., in April—it might possibly obtain a more favourable reception than can be expected for it at the present time. The monthly agreement has its advantages and also its defects, and as might be expected, both among owners, agents, and workmen much difference of opinion prevails respecting it. One of its most glaring defects is admitted to be that it causes much more removing of the men among the collieries than would occur with the yearly bond; as the balloting for places in each colliery occurs quarterly, the men often change at those periods for the purpose of seeking better places than they have secured at the collieries where they may happen to be. The yearly bond of course removes this objection, and this is, no doubt, the main cause that it has been introduced at many of the collieries on the Wear, and in the county of Durham generally, and it is quite possible that it may shortly be introduced into Northumberland also. However, there is little doubt that this misunderstanding will be speedily adjusted.

Agreements have, indeed, been made at several collieries already—at Backworth, Seaton Burn, Cramlington, &c.; and as the owners have decided to throw the yearly bond out of the question, there is no doubt that all other differences will be settled, as the men appear to be willing to submit to a slight reduction in their prices. The state of trade continues to be considerably depressed; with the exception of gas and coking collieries, all others are very flat, the steam coal collieries especially so. The new year, if it brings the termination of the disastrous and stupid war in America, may, possibly, bring also brighter prospects.

An explosion of gas occurred at the Monkwearmouth Colliery, on Monday. This ill-fated colliery is in consequence stopped for a few days. The occurrence was of a most singular nature; the explosion having occurred at the furnace underground. A small quantity of gas had, it appears, accumulated near the furnace, and when the man in charge raised the fire, an explosion took place. Fortunately no injury was done, excepting blowing the fire out of the furnace, and slightly burning the man. The fire, it appears, had extended no farther, but exhausted itself in the vicinity of the furnace; and all the men and boys got safely out of the pit. How the gas could accumulate there without fouling the general current of the mine, appears to be inexplicable. The mine has been laid off work until an examination can be made by Mr. Smith, the viewer, and his assistants.

A rumour is current respecting some movement in reference to the old subject, the "Tyne drainage." It is understood that an attempt is to be made to form a company for the purpose of draining the Wallsend and Hebburn Collieries in the first place, and so getting some of the valuable coal contained in them. At present the result is, of course, uncertain; but the probability is, that the scheme will succeed, which it well deserves to do. The coal in the Hebburn Colliery is very valuable, a large quantity remaining in the High Main seam, and also in the Bensham seam; while the Low Main seam has not as yet been worked at all.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

JAN. 1.—The Iron Trade in this county, both in the northern and southern divisions, may still be reported tolerably active, and there is reason to expect a good number of orders at the quarterly meetings, next week. Prices are low, but there is a good demand, and a prospect of its continuance. The numerous companies set on foot last year will in most cases be consumers of iron, and the continental and Indian demand will, probably, be more active in the present than in the last year. It is satisfactory to be able to state that the iron trade in this county is in a far more satisfactory position than it has been for some years past, in reference to the solvent position of those engaged in it. There are, no doubt, still weak firms, but several of those which were regarded with distrust are now looked upon as in an improving state, and, on the whole, the trade is sound. In the Hardware Trades there is generally a tolerably good demand. In the tin-plate and japan branches a degree of slackness is felt just now, which is the natural consequence of the winter orders having been worked up, but in the majority of the trades of the district there is a fair degree of activity. The chain, screw, bolt, and cut nail makers are well supplied with orders, although prices are low. At Wednesbury there is an improvement in the demand for railway work, which has been rather dull during the last six months. At Birmingham most of the trades are moderately brisk, and there were 3188 paupers less receiving relief on Dec. 20 than at the corresponding date of 1861. In the South Staffordshire Union the increase of pauperism, if any, is of slight amount.

Nine men and three boys were killed, on Monday morning, at the colliery of the Lilleshall Company, at Prior's Lee, in Shropshire, of which Earl Granville is the principal proprietor. One lot of men and boys, twelve in number, were safely lowered down a shaft 260 yards deep, shortly before six o'clock on Monday morning. On the skips being raised twelve more—nine men and three boys—entered the skip. When it had descended about ten yards the skip became detached from the rope, and rushed with accelerating velocity down the shaft its twelve occupants were killed, and several of their bodies frightfully mangled. On examination it appeared that the pin of the spring-box by which the skip was suspended had broken, and thus let down the living load suspended by it. It is worthy of note that a boy named Amos Pearce, who had got into the skip, was pushed out before it began to descend on account of its being full without him. At the inquest, held on Wednesday, it was stated that the spring-box was one of Spence's patent, and that the pin was equal in transverse area to a wind-bolt of 1½ in. diameter. John Marlon, Inspector of engines, machinery, ropes, and chains for the company, proposed that he had examined the spring and box on the previous Friday, and did not find it in any way defective. He had examined it carefully a fortnight previous, and it then appeared as good as when new, eighteen months previous. John Lloyd, the engineer to the company, said he could not in any way account for the accident. He had examined the iron, and thought it was of good quality. In the course of the enquiry it appeared, whilst it was known that the special rules restricted the number of persons who ought to be lowered at one time to eight, that it was the regular practice, as on the morning of the accident, to send plainants of the violation except the engine-driver to Marlon, who did not report it. Mr. Wynne, the Government Inspector, was at the inquest, which was adjourned.

At the Wolverhampton Police Court, on Friday, Mr. Silas Bookley, mine agent for Messrs. Williams and Co., was fined 5*l.* and costs for neglecting to send a notice to the Secretary of State of an accident at the Bradley Colliery; and Mr. Benjamin Wood, proprietor of the Lays Colliery, Brierly Hill, was fined in a similar amount for neglecting to provide a break for the steam-engine connected with the pumping-shaft, where a man was killed. The informations in these cases were laid by Mr. Baker, Mines Inspector.—At the same Court, yesterday, Jacob Carter appeared, in answer to a summons issued at the instance of Mr. Baker, charging him with improperly and insecurely fencing a pit shaft at the Old Grange Colliery, Lower Gornal. The defendant and two other men sunk a shaft 16 yards deep to abandoned workings, with a view to ascertain whether any remnants of coal might be found there. They then commenced to sink another shaft at the distance of a few yards, fencing the first shaft with chains, but, as was proved, in an insecure manner. On Aug. 15, a few days after the work had commenced, Thomas Kilson, a boy 4½ years old, fell down the shaft, and died on the next day. The defendant was fined 5*l.* and costs, and at his request was allowed ten days to pay the amount.

At the Stourbridge Petty Sessions, yesterday, Messrs. Evson and Sons were fined 5*l.* and costs for paying a man, named George Hill, in goods instead of the current coin of the realm. Sixpence per week was, it appears, deducted for drink, and the plaintiff said he had to take coals, which he did not require. Several other cases were settled by defendants paying the costs. The defendants objected to the summonses being in the name of John Evson and Sons, but the objection was over-ruled by the magistrates.

A new company, entitled the Midland Counties Union Banking Company (Limited), is now announced. The promoters have purchased the bank of Sir Francis Goodricke, at Wolverhampton, and propose to purchase other private banks in the midland district. Sir Francis Goodricke is one of the directors, and [Mr. Charles Clark, and Mr. Moses, ironmonger, both gentlemen of good position, and who have each served the office of Mayor of Wolverhampton, are local directors. It is stated "The management of the bank will be conducted by the board of directors in London, who will have the assistance and counsel of local boards of supervision, to be formed in the principal towns in the country, where branches are to be established—the country directors being also members of the London board, and having the conduct of the local business. It is not intended to carry on any banking business in the metropolis other than that arising from the agency of the country branches, but the establishment of the chief office in London will remove many of those causes of local jealousy and private interest which have, in so many instances, militated against the success of country banks. It will also afford greater facilities for the judicious invest-

[EXTRACTS FROM OUR CORRESPONDENCE.]

Messrs. FULLER and Co. having had upwards of 20 years' experience in the mining market, prompt them to point out shares in certain progressive mines as prizes for the year 1893.

Telegraphic messages promptly attended to.

Commission, 1¼ per cent.

Bankers: Metropolitan and Provincial.

TO THE EDITOR OF THE MINING JOURNAL.

freehold; and in several mines which pay regular dividends of 12½ to 20 per cent.
Messrs. FULLER and Co. having had upwards of 20 years' experience in the mining
market, prompt them to point out shares in certain progressive mines as prizes for the
year 1883. Telegraphic messages promptly attended to.
Commission, 1¼ per cent.
Bankers: Metropolitan and Provincial.

TREGURTHA DOWNS AND OWEN VEAN CONSOLS
MINING COMPANY (LIMITED).
ST. HILARY AND PERRANUTHNOE, CORNWALL.
Capital, £40,000, in 16,000 shares, of £2 10s. each.
Deposit, 5s. per share on application, and 15s. on allotment.
BANKERS.
Union Bank of London, Finsbury-street.
Messrs. Virvies, Gyles, Kendall, and Co. Helston.
Messrs. Bolitho, Sons, and Co. Penzance.
SOLICITORS.
H. Grylls Hill, Esq., 17, Barge-yard Chambers, London.
Messrs. Grylls, Hill, and Hill, Helston.
LONDON MANAGERS—Messrs. Dunsford and Ranken, 9, Broad-street-buildings.

These mines are in a district in Cornwall, which has yielded copper and tin worth from £5,000,000 to £10,000,000 sterling.
The reports are unusually numerous and favourable, and by miners of the highest reputation.
Detailed prospectuses, with maps, plans, reports, forms of application, and all information may be obtained of Messrs. Dunsford and Ranken, No. 9, Broad-street-buildings, and will be forwarded by post on application.

THE ROARING WATER MINING COMPANY (LIMITED).
Incorporated pursuant to the Joint Stock Companies Acts, 1862.
Capital, £18,000, in 6000 shares of £3 each.
10s. to be paid on application, and 10s. on allotment.
DIRECTORS.
Sir JAMES DOMBRAIN, Monkstown, and 20, Molesworth-street, Dublin.
Colonel BUSH, 65, York-terrace, Regent's Park (Director of the Oriental Inland Steam Navigation Company).
CHARLES HAWKINS, Esq., 12, Broad-street, Oxford (Director of the St. Just Mines).
WILLIAM OGILVIE, Esq., Cushman-court, Old Broad-street (Director of the St. Just Mines).
Captain PAUL, Queen's-road, Bayswater (late of the Knockmahon Mines).
H. CHURCHILL, Esq., Deddington, Oxfordshire (Director of the Strand Hotel Company).
BANKERS—London and County Bank, Lombard-street.
SOLICITORS.
Messrs. Mayrick and Gedge, 4, Storey's Gate, Great George-street, Westminster.
AUDITORS—Messrs. Cooper Brothers, public accountants, George-street, Mansion House.
BROKERS.
Messrs. Webb and Gedge, 8, Finch-lane, Threadneedle-street, London.
Messrs. J. and J. Stephens and Son, 44, Dame-street, Dublin.
Robert M'Ewen, Esq., Ducie-buildings, Bank-street, Manchester.
MANAGER—Mr. Thomas Cooper Smith.
OFFICES—5, WAREHOUSE COURT, THROGMORTON STREET, CITY.

The object of this company is to work the copper mines of Roaring Water, situated in the county of Cork, a district well known among mineralogists as being rich in mineral deposits. The set extends over 1½ miles in length, and ¾ of a mile in breadth, and is held for a term of 31 years from July last, at a royalty of 1-18th, with a clause for renewal, on payment of a comparatively small fine at the end of that period, for the same term.

The promising character of the mines proposed to be worked by the present company fully warrants the expectation that early returns will be realised; there are 19 well-defined lodes upon the set, composed principally of yellow and peacock copper ores, rich specimens of malachite, friable quartz, and gossan of the finest description, from which many tons of rich ore have been taken, which on assay have been found to contain a large proportion of silver, and strong traces of gold. These lodes beyond all doubt are a continuation of the rich veins of copper now working with such great promise and success at the Schull Bay, Cappagh, and Ballycummick Mines, all of which there can be no reasonable doubt are a continuation of the Berehaven lodes, which have returned enormous profits.

The several reports are from men of long practical experience, their testimony as to the highly-promising character of the property, and the great local advantages by which it is surrounded will be read with interest, and leave nothing to be urged by the directors, except an assurance of their strong confidence as to its value, and that this property will bear comparison with any of the rich mines opened in the district.

A large portion of the capital has been subscribed.
Applications for shares to be made to the bankers, directors, solicitors, brokers, and the manager, at the office of the company, where prospectuses and forms of application may be obtained; also reports on the mines from Capt. HENRY THOMAS; Capt. PAUL, late of the Knockmahon Mines; Capt. CHURCHILL, of the St. Just Mines; Capt. MARTIN BOUNDY, of Dublin; and Capt. JAMES HOSKING, late of the South Cork Mines.

THE ROARING WATER MINING COMPANY (LIMITED).
APPLICATIONS FOR SHARES IN THIS COMPANY WILL BE RECEIVED UNTIL THE 15th JANUARY, 1863.
THOS. COOPER SMITH,
5, WAREHOUSE COURT, THROGMORTON STREET, LONDON.

THE EAST CAMBRIAN GOLD MINING COMPANY
(LIMITED).
MERIONETHSHIRE, NORTH WALES.
Incorporated under the Companies Act, 1862, with limited liability.
Capital, £50,000, in 50,000 shares of £1 each.
Deposit, 5s. per share on application, and 5s. on allotment.
If no allotment, deposits will be returned in full.

DIRECTORS.
CHAIRMAN—Lieut.-Gen. Sir F. M. SMITH, M.P., K.H., F.R.S., 39, Hyde-park-square, (Chairman of the Naval and Military Association).
J. HOPGOOD, Esq., 15, George-street, Hanover-square, W., and New House, St. Alban's Her (Chairman of the Llanthylltydd and Colliery Company).
P. LARCELLES, Esq., Neigherry House, Hampstead (Chairman of East Indian Freehold Land Association).
Lieut.-Col. MONEY, 9, Berkeley-street, Berkeley-square (Director of Canadian Native Oil Company).
MILES CHARLES SETON, Esq., Randolph House, Malda-hill, and Wheel Seton, Cornwall.
CORNELIUS WALFORD, Esq., 8, Cannon-street, and Little Park, Enfield.
Lieut.-Col. WRAOGE, Fairfield House, Old Charlton.
BANKERS—London and County Bank, Lombard-street.
BROKERS—Sir Robert W. Carden and Son, 2, Royal Exchange-buildings.
SOLICITOR—A. Fulbrook, Esq., 61, Basinghall-street.
AUDITOR—James Holah, Esq., public accountant, 7, Lothbury.

The East Cambrian Mine is bounded by the Prince of Wales and Cambrian Mines, several of their lodes running through it. The shares in the former, with £2 15s. paid, sell for £26; and the latter, in three months, have risen 75 per cent.
T. A. Readwin, Esq., F.G.S., before the British Association, stated "The mine has yielded, it is said, at the rate of 8 oz. of gold to the ton of galena." A deputation of directors, after a personal visit, have expressed entire confidence in its prospects.
Assays of samples from the lodes give from 4 dwts. to 5 oz. of gold per ton.
The purchase-money for the property is £5000 in cash and £10,000 in shares, not to be handed over until six months after allotment. The vendors are so satisfied with the prospects of the company that they have left the arrangements for payment to the absolute discretion of the directors.
Detailed prospectuses, with reports and forms of application for shares, may be had of the brokers, solicitor, or secretary, S. TAYLOR, Esq., 27, Buckersbury, London.

ASPHALTUM COMPANY (LIMITED).
Shareholders who have paid, as well as those who have not paid, the call claimed by the liquidators of this company, are requested to communicate, either personally or by letter, with Messrs. GIBBS and TUCKER, solicitors, Lothbury, London.

GRESHAM LIFE ASSURANCE SOCIETY,
37, OLD JEWRY, LONDON, E.C.
DIRECTORS' ANNUAL REPORT, PRESENTED AT THE ORDINARY GENERAL MEETING OF THE GRESHAM LIFE ASSURANCE SOCIETY, HELD AT THE HEAD OFFICE, 37, OLD JEWRY, E.C., IN THE CITY OF LONDON, ON TUESDAY, DECEMBER 23, 1862.

The following statement comprises the chief elements of the Society's transactions during the financial year ending July 31st, 1862, and constitutes the Report of the Directors for such year to the general meeting.
The proposals offered have been exceedingly numerous, being 2678 in number, for Assurances amounting to £1,207,101, making an amount of no less than twenty thousand pounds, for ten millions of insurance since the commencement of the Society. The number for which the Directors have accepted and issued policies is 2135, for assurances of £1,076,940; in respect of which £20,373 2s. 10d. has been added as new premiums for the year.

The general premium income, after bonus reductions, has been £123,409 6s. 10d., exclusive of interest upon investments and annuities.

The Deaths, with the bonuses attached to the policies constituting claims, have amounted to £47,409 16s. 11d., thus completing a total of more than a quarter of a million distributed by the Society among the families of deceased members.

At the close of the year, after allowance for the various items of expenditure, and after exclusion of the share capital and deposits, the remaining funds actually accumulated and invested at interest, amounted to £220,847 8s. 1d.

The accounts for the year, with the various details, have been monthly investigated by the auditors, and being certified by them to be correct, have already been circulated, and are now submitted for approval and adoption.
During the past year the directors have had various methods for the extension of business under their notice, but, as on former occasions, have not extended their agencies beyond the limits of Europe, so as not to include any case, or class of cases, that cannot be rigidly investigated from week to week personally by the board. The usual action, by the assured, of so many days of grace, for the option of paying or not paying their premiums, will always prevent the premium account from being purely in a cash state, but as every approach to a clear apprehension of the real financial result is to be desired, the efforts of the directors will be ever exerted in such direction. The system now adopted consists in not taking credit, as a manner of account, for all the raw business transacted in the gross, but in writing off the main charges, and carrying forward, as new premiums, such remaining portion only as may be fairly representative of the moneyed result.

During the year the Joint-Stock Companies Act of 1862 has come into operation, rendering it necessary that a new registration of companies should take place, with the distinction of unlimited companies, limited companies, or companies limited by a guarantee. After taking all the circumstances into consideration, and the particular nature of the society's transactions, the directors determined that the Gresham Life Assurance Society should be registered without any limit otherwise than by its own contracts, and have so registered it accordingly.

The directors retiring on the present occasion are John Beadnell, George Lowe, F.R.S., and Joseph Williams, Esqrs., who, being re-eligible, offer themselves, and are recommended by the board as the list for election.

Messrs. G. H. Ladbury, William Webb Venn, and William Whitlock, are the three auditors who retire, and again offer themselves for election.
In conclusion, the directors conceive there is ample reason to be satisfied with the progress the Gresham Life Assurance Society has made, and will never cease, by every means in their power, to uphold the high character it has already obtained, and to extend its usefulness upon every occasion that may legitimately present itself.

By order of the board,
EDWIN JAMES FARREN, Actuary and Sec.

37, Old Jewry, London, E.C., Dec. 23, 1862.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the WHEAL HENRY MINING COMPANY.—The Registrar of this Court has appointed the 23rd day of January next, at the Registrar's office, at Truro, to SETTLE the LIST of CONTRIBUTORIES of the ABOVE-NAMED COMPANY, now made out and deposited at the said office.

WILLIAM MICHELL, Registrar of the said Court.
Dated this 24th day of December, 1862.

In Chancery.

IN THE MATTER OF THE JOINT-STOCK COMPANIES WINDING-UP ACTS, 1848 and 1849, and of the TRETOL AND MESSER MINING COMPANY.

MR. E. H. LIDDELL, Auctioneer, has received instructions from F. Whinney, Esq., the official manager of the above company, to SELL, BY AUCTION, on Thursday and Friday, the 15th and 16th of January, 1863, at TRETOL AND MESSER MINE, Cornwall, about two miles from Bodmin, the PLANT, MACHINERY, and EFFECTS thereon, viz.:

A 36 in. cylinder PUMPING ENGINE, and TWO BOILERS 18½ tons.
A 22 in. cylinder STAMPING ENGINE, with 24 heads of stamps attached.
A water-wheel and stamps, capstan, capstan rope, shears, balance bob, pitwork, and other effects of an extensive mine, full particulars of which are given in handbills.
The whole of the materials, &c., on the mines will be first offered in one lot, and if not so disposed of the engines, and the other more valuable articles, will be sold on the first day, and the remainder on the second day.

Catalogues, with further particulars, may be obtained of Messrs. VALLANCE and VALLANCE, solicitors, Essex-street, Strand, London; Messrs. HARDING, PULLEN, WHINNEY, and GIBSON, accountants, 5, Serio-street, Lincoln's Inn, London; Capt. RICH, on the mine; or of the Auctioneer, at Bodmin, four days before the sale.
The sale to commence at Eleven for Twelve o'clock precisely.
Dated Bodmin, December 26, 1862.

TO ENGINEERS, MINING AGENTS, AND OTHERS.

IN THE MATTER OF THE RIBDEN MINING COMPANY (LIMITED).

MR. JAMES CARTER WILL PEREMPTORILY SELL, BY AUCTION (by order of the liquidators of the said company), on Thursday, the 22nd day of January, 1863, in one or more lots or lots, and subject to such conditions as will be declared at the time of sale.

All that the UNEXPIRED TERM of 21 years, from 25th March, 1855, of and in the LEASE of the RIBDEN SETT, dated the 1st day of September, 1855, and granted by the late Right Honourable Bertram Arthur Earl of Shrewsbury, to Messrs. Richmond and Nines.

Also, the whole of the VALUABLE WORKING PLANT of the RIBDEN COPPER MINE, near to Aiton Towers and Oakmoor, in the county of Stafford, and consisting in part of a CORNISH PUMPING ENGINE, 10 ft. stroke, with 50 in. cylinder, and a 10 ton BOILER, and every other requisite, now in capital working order.

Also, another excellent 25 horse power STEAM ENGINE, with 18 inch cylinder, BOILER, wrought-iron chimney and fixings complete, and in good condition, now used as a rotary winding engine.

About 100 ft. of pumping apparatus and pitwork, of the best construction; 2 valuable 12 in. capstan ropes (one quite new), powerful capstan, horse whinsey and other machinery, the contents of a smith's shop, a large quantity of timber, wrought-iron, cast-iron, office desk, and miscellaneous effects, as per catalogues, which will be ready ten days prior to the day of sale, and may be had at the offices of the auctioneer, High-street-place, Nottingham; or of Captain R. Nines, Warslow Cottage, Ashbourne; the White Hart Hotel, Uttoxeter; and the Wheatsheaf Inn, Cheddale.

The sale will commence punctually at Twelve o'clock, at the mine, which is situated about three miles from the Aiton and Oakmoor stations of the North Staffordshire Railway, and the engine, pumping plant, &c., will be sold at Two o'clock precisely.

RAILWAY PLANT FOR SALE, BY AUCTION, at WHITROPE, near the "RIC-CARTON JUNCTION," and at SHANKEND STATION, on the BORDER UNION RAILWAY, ROXBURGHSHIRE, on MONDAY, TUESDAY, and WEDNESDAY NEXT, January 5th, 6th, and 7th, 1863.

Mr. W. HIRSON having completed his contract upon the "Border Union" section of the North British Railway.

MR. GEORGE HARDCASTLE is instructed to SELL, BY AUCTION, on MONDAY NEXT, January 5th, at WHITROPE:

Malleable iron ships, gun drums, huts and hut scantling, hardwood centres, hemp and wire ropes, WYNN'S CENTRIFUGAL 6 in. PUMP, CONTRACTORS' RAILS, scrap metal, two PORTABLE ENGINES, with 8 and 9 in. cylinders, by Hornsby and Son; TWO HORIZONTAL ENGINES, with 12½ and 18½ in. cylinders; three sets of friction gear, CORNISH and OTHER BOILERS, MORTAR MILLS, sets of 7½, 9, and 12 in. pumps, fan blasts, large and small weighing machines, beams and scales, malleable iron blocks, HYDRAULIC PRESS, screw jacks, new nails, circular saws, EIGHT FLAT-BOTTOMED STONE BOGIES, FORTY "PEDESTAL" EARTH WAGONS, THIRTY-SEVEN "ROLLER" EARTH WAGONS, EIGHTEEN "FIDDLESTICK" EARTH WAGONS, SIXTEEN "JOINT" EARTH WAGONS, and numerous miscellaneous articles of value.

On TUESDAY NEXT, January 6th, 1863, at WHITROPE:

Earth barrows, malleable wagon axles, scrap iron, drills, chains, patent scale, pit lugs, large screw stocks, boring rods, new smith's bellows, drilling, quarry, and stone hammers, miners' picks, punching machines, anvils, vices, and smith's tools, upwards of ONE HUNDRED SETS of capital TRACE HARNESS, TWENTY-ONE CART SADDLES, with breeching, TWENTY-TWO NEW SCOTCH and OTHER CARTS, long cart, spring cart, FIVE strong TIMBER WAGONS, hay cutters and corn crushers, by Turner, of Ipswich; new oak wagon wood, wooden huts, hut framing, and a great variety of costly and useful articles.

On WEDNESDAY NEXT, January 7th, 1863, at SHANKEND:—Hemp and wire ropes, new wagon wood, single and double winches, scrap metal, CONTRACTORS' BRIDGE and FLAT RAILS, smith's bellows, anvils, vices, and tools; HORIZONTAL ENGINES, 12 and 18 in. cylinders, by Hawthorn; friction gear, wire rope, MORTAR MILL, THIRTY-SEVEN "JOINT" EARTH WAGONS, THIRTY-ONE "PEDESTAL" EARTH WAGONS, THIRTY-FOUR LARGE "PEDESTAL" EARTH WAGONS, FOURTEEN "ROLLER" EARTH WAGONS, SIXTY-THREE LARGE "FIDDLESTICK" EARTH WAGONS, THIRTEEN SMALL "FIDDLESTICK" EARTH WAGONS, TWENTY-THREE SMALL "PEDESTAL" EARTH WAGONS, CONTRACTORS' RAILS, TRAVELLING JIB CRANES, TWENTY-TWO "SIDER" EARTH WAGONS, and numerous other articles of cost and utility.

N.B.—For the convenience of gentlemen attending the sales, the morning trains leaving Newcastle at 6.35, Carlisle at 8.15, and Edinburgh at 6.40, and the afternoon trains arriving at Newcastle at 4.15, at Carlisle at 7.15, and at Edinburgh at 6.2, will stop at the south end of the Whitrope tunnel on Monday and Tuesday, and at Shankend on Wednesday, to set down and take up passengers.

The sales to commence each morning immediately after the arrival of the trains. Refreshments will be provided for purchasers.
PAYMENTS:—Up to £50, in cash; above £50, in approved bills at three months, or 2 per cent. discount will be allowed for cash.

Catalogues may be had gratis on application to Mr. HIRSON, or Mr. HARRISON, C.E., Hawick; Mr. NAIN, North British Railway Office, Edinburgh; Mr. TONE, C.E., New castle-upon-Tyne; or to Mr. GEORGE HARDCASTLE, the Sunderland Sales Office, Sunderland, Durham.

The Crown, the Tower, and other excellent hotels at Hawick, are within half an hour's railway run of the places of sale.
The Sunderland Sales Office, December 31, 1862.

IMPORTANT SALE OF FIRST-CLASS MACHINERY.
LEE MOOR PORCELAIN CLAY and BRICK WORKS, three miles from Cornwood Station, and five miles from Plymouth Station, on the South Devon Railway, and adjoining the road leading from Tavistock to Ivybridge.

MR. JOHN ANDREW WILL SELL, BY AUCTION, without reserve, on Monday and Tuesday, the 12th and 13th of January inst., on the above works, a quantity of VALUABLE MACHINERY and OTHER EFFECTS, in WATER-WHEELS, 180 feet of coupling rods, HYDRAULIC CYLINDER and PRESSES, iron and wood pumps with copper workings, TRAM RAILWAY WAGONS and clay boxes, cast iron shovels, plunger boxes and brasses, carpenters' benches, carpenters, smiths, and masons' tools, taps and dies, several hundred feet of wrought-iron rods and chains; sawing frame, with a 40 ft. bench, and FOUR CIRCULAR SAWs; several tons of rough and cast-iron, several IRON BRICK PRESSES and PIPE MACHINES, THREE THOUSAND SIX HUNDRED SOCKET PIPES and BENDS of different sizes, THREE THOUSAND TWO HUNDRED DRAIN PIPES, FORTY ORNAMENTAL CHIMNEY TOPS, fine dressed granite in columns, gate posts, window sills, flooring, door steps, &c., rollers, large water trough, a quantity of rough granite, linings and gate posts, slate window sills, two phaetons, two sets of horse harness, saddles and bridles, &c.
For further particulars, see printed bills. Sale to commence each day at Eleven o'clock in the forenoon.

Catalogues of the lots can be obtained at 6d. each, which will be returned to purchasers, three days previous to the day of sale, of the auctioneer, at Ridgway; Mr. BIRMINGHAM, printer, Plymouth; or of Mr. HARRIS, on the works, of whom every information can be obtained.

N.B.—There is a tram railway from the above works to Prince Rock, near Plymouth, over which goods purchased at the sale can be removed at a trifling expense.

COMPRESSED FUEL WORKS (Ashcroft's Patent), ABERDARE, GLAMORGANSHIRE, with the PLANT and MACHINERY and LETTERS PATENT; also, a LEASEHOLD COTTAGE and WORKSHOP at CARDIFF.

Messrs. FULLER and HORSEY are instructed to SELL, BY AUCTION, on Tuesday, January 20, 1863, at Twelve o'clock, at the Auction Mart, London, in Two Lots, the FUEL WORKS, together with the PLANT and MACHINERY and Letters Patent, belonging to the ABERDARE PATENT FUEL COMPANY (LIMITED), at Aberdare, about half a mile from the Treman station of the Aberdare Railway.

The land upon which the works are erected occupies a site of about three acres, and is held from the Marquis of Bute, for a term of 60 years, at a ground rent of £50 per annum. It has a considerable frontage next the Aberdare and Glamorganshire Canal, and two lines of railway (broad and narrow gauge) run within a few yards of the property. The works were constructed in 1859, and comprise the FUEL FACTORY, fitted (under Ashcroft's patent) for improvements in working hydraulic presses, by which a much accelerated speed is obtained, and power saved, with a very powerful double cylinder HYDRAULIC FUEL PRESS, capable of compressing 100 tons of fuel daily; twelve FUEL MIXING MACHINES, with furnaces, pair of crushing rolls for pitch; two FUEL MIXING BOILERS; a range of brick-built shops, for engineers, carpenters, and smiths, fitted with valuable and modern tools, including LATHES, PLANING and DRILLING MACHINES, worked by a separate STEAM-ENGINE, benches, forges, &c.; an office; coal receiving shed, with screens; wharf, with stone quay wall, about 120 ft. long, yards intersected with iron tramways, and manager's house, with garden and ground. Coals may be procured from adjoining collieries at 1s. per ton. With this lot will be included the Letters Patent for Great Britain and Ireland, dated April 15, 1859, for "Improvements in working presses and other hydraulic machines."

Lot 2 will comprise the LEASEHOLD INTEREST in a brick-built WORKSHOP, fitted with BOILER and STEAM-ENGINE; also, a COTTAGE and LAND, situate at MAINDY BANK, about one mile from Cardiff, and on the banks of the Glamorganshire Canal. The workshop, cottage, and land are held for the remainder of a term of 21 years, at a rent amounting to £24 6s. per annum.
To be viewed till the sale. Particulars may be had at the Angel Hotel, Cardiff; the Westgate Hotel, Newport; of Messrs. COURTNEY and CHURCH, solicitors, 5, Gracechurch-street, London, E.C.; at the Mart; and of Messrs. FULLER and HORSEY, Billiter-street, London, E.C.

GREAT WHEEL ALFRED, HAYLE, CORNWALL.

MR. BURGESS, Auctioneer, Barncoose, Redruth, WILL SELL, BY PRIVATE CONTRACT, at GREAT WHEEL ALFRED, HAYLE, CORNWALL,
ONE 65 in. cylinder PUMPING ENGINE; ONE BOILER and fittings, about 12 tons; first piece of main rod caps and brass.
ONE 25 in. cylinder ENGINE for WINDING and CRUSHING; ONE CRUSHER in excellent order.
ONE 47 in. cylinder ENGINE and BOILER. PUNCHING MACHINE, BORING MACHINE, and SCREWING MACHINE.
2 capstans, 3 capstan ropes, 20 and 21 in. pumps, H pieces, doorpieces, matchings, tram wagons, skips, kibbles, new shaft gig, &c.; mandril, lot of double faggetted iron, with many other things.
For any further information, apply to DAVID COHEN, Esq., 5, Bank Chambers, Lothbury, London; or to JAMES HOLLOW, Esq., Leland, Hayle, and 1, Crown-court, Broad-street, London.

FOREST OF DEAN.

TO BE SOLD, the COLLIERIES known as EDEN WALL and MILK WALL, situate near COLEFORD, in the FOREST OF DEAN, in the county of GLOUCESTER, held under the Crown at annual rents of 10s. and £1 respectively, and a royalty of 1d. per ton.—Apply to H. H. STANFELD, Esq., 1a, Basinghall-street; or to Messrs. MAPLES, MAPLES, and TESSDALE, 6, Frederick's-place, Old Jewry, London.

SLATE QUARRY TO BE SOLD, upon the Crown property, and on the vein and within a little distance to another splendid and approved quarry, the land rising 3 ft. in the yard, and the width of the vein about 300 yards, with abundance of water-power quite close to it. The present owners have spent £64 in the quarry, and whoever will spend £250 shall have one-half.—For further particulars, apply, with enclosed stamped envelope, to DAVID WILLIAMS, Dolgarrag, Trefriw, near Conway.

TO COLLIERY PROPRIETORS, CAPITALISTS, AND OTHERS.—TO BE DISPOSED OF, BY PRIVATE CONTRACT, the COAL, IRONSTONE, and OTHER MINERALS, UNDER the ESTATE of the late George Silvester, of West Bromwich, Staffordshire, consisting of about FIFTY ACRES. An adjacent colliery has worked up to less than 100 yards of the estate, the seam being very thick, and of superior quality. The Great Western Railway runs through the estate, and it is within a few hundred yards of the canal.—For further particulars, apply to Mr. THOMAS SILVESTER, West Bromwich; Mr. BARTLEY, solicitor, 22, Waterloo-street, Birmingham; Mr. A. S. SILVESTER, 51, St. Paul's-square, Birmingham; and Mr. J. B. SILVESTER, West Bromwich.

KIRKCUDBRIGHTSHIRE.

GRANITE QUARRY TO LET, on the ESTATE of KIRKCONNELL, situate about 400 yards from the mouth of the River Nith, where there is excellent shipping accommodation. The quarry is as yet only partially opened, but the stone, which is of excellent quality, can, from the sloping position of the ground towards the river, be easily shipped by means of a tramway, without carting. Freight is very low to Liverpool, Glasgow, and Belfast, where there is a great demand for granite.

Written offers will be received, till 1st of MARCH, by Mr. NORVAL, Inspector of the Nith Navigation Works, Glencaip, Dumfries, who will give all particulars, and show the quarry, which is well worth the attention of persons or a company with capital, as the facilities for getting out the granite are very great.

TO LET, on liberal terms, a VALUABLE LEAD MINE in SOUTH WALES, with 60 feet WATER WHEEL, CRUSHER, and OTHER MACHINERY.—Apply to Mr. FRATT, Crickhowell.

SALE OF BASTIER'S CHAIN PUMP PATENT.
MR. J. U. BASTIER is DESIROUS of FINDING a PARTNER for CONTINUING the DEVELOPMENT of his ENGLISH PATENT for his CHAIN PUMP, or he is WILLING to SELL the ENTIRE or PART of HIS INTEREST therein. He proposes to grant four exclusive licenses for the full term of the patent, for England, Scotland, Ireland, and Wales respectively:—
For the license for England, he demands the sum of £2000 for the unreserved transfer, or £1000 if 25 per cent. of the net profits be secured to him.
For the license for Scotland, he demands £1500 for unreserved sale, or £750 with 25 per cent. of profits.
For the license for Ireland, he demands £1400 for unreserved sale, or £700 with 25 per cent. of profits.
And for the license for Wales, he demands £1200 for unreserved sale, or £600 with 25 per cent. of profits.
Address, J. U. BASTIER, C.E., 47, Warren-street, Fitzroy-square, London.

TO SULPHURIC ACID MANUFACTURERS.—SULPHATE OF LEAD and LEAD ASHES PURCHASED.—Address samples, Bedminster melting Works, Bristol.

TO SHIPPERS AND DEALERS IN COALS.

THE INCE HALL COAL AND CANNEL COMPANY beg to inform shippers and dealers that, on the retirement of Messrs. W. and H. Laird as their sole agents for the sale of their coals and cannel in Liverpool, they are now PREPARED to SUPPLY COALS, CANNEL, COKE, and SLACK DIRECT from their MINES.

All applications or orders addressed to the company's offices, 40, Exchange-alley, Old-hall-street, Liverpool, or to the works, Wigan, will receive prompt attention.
GEORGE GILROY, Manager.
Ince Hall Coal and Cannel Works, Wigan, November 1, 1862.

THE BOTTOMS OF IRON SHIPS PRESERVED FROM CORROSION, AND PROTECTED FROM FOULING, DURING A VOYAGE ROUND THE WORLD.

Messrs. PEACOCK and BUCHAN beg to CALL the ATTENTION of IRON SHIPOWNERS to their IMPROVED No. 2 COMPOSITION for the BOTTOMS of IRON SHIPS. It contains NO COPPER in ANY SHAPE, and thus PREVENTS the DESTRUCTION of the RIVETS and JOINTS—COMBING of the PLATES, besides KEEPING CLEAN as LONG, or LONGER, than preparations which contain copper, whilst it is CHEAPER, and MORE EASILY APPLIED. It is in use on the iron fleets of the Peninsular and Oriental Company, the Royal West India Mail Company, and many other great shipping companies, and has been tested by the Lords Commissioners of the Admiralty, for a series of years, on the iron troopship *Himalaya*, and other iron ships of war, in competition with rival compositions.

The paddle wheel steam-vessel, *Triton*, 6, at Devonport, having been thoroughly repared, rigged, and stored, is now ready for the first division of the steam reserve. This is the ship the iron plates of which were reduced to the thickness of paper by galvanic action, induced by the vessel having been coated with a preparation of copper. She is now covered outside with the composition of Messrs. Peacock and Buchan.—*Times*, December 22, 1862.

Apply to Messrs. PEACOCK and BUCHAN direct, Southampton.

MATTHEW BARTON, IRON AND STEEL MERCHANT.

Having purchased by private treaty a large quantity of COLLIERY and OTHER PLANT, almost of every description, has ON SALE:—

TWO 30 horse power BEAM ENGINES, with or without boilers.
ONE 25 horse ditto ditto
ONE 14 horse power HORIZONTAL ENGINE, with or without boiler.
TWO 12 horse ditto ditto
TWO 8 horse ditto ditto
THREE 6 horse ditto ditto ditto
TWO 4 horse ditto ditto ditto

FIVE 3 horse power VERTICAL ENGINES, with or without boilers.

Several other SECOND-HAND BOILERS ON SALE. An immense stock of pump trees, with clack and bucket pieces, 6 in. to 15 in. bore; brass and iron working barrels, all sizes; 4 large ram pumps; 9 double pumping cranks, various; 5 single ditto; 7 L legs, various; sundry knock-off joints, slide rods, and fork ends, with wing plates; 3 drums, with wrought arms, lag'd for wire-ropes; 14 head gear pulleys, various sizes, for running ropes; 3 ditto, for flag ropes; 2 cart weighing machines, 5 tons; 1 more IMPROVED to 14 tons; a large quantity of wrought-iron (second-hand), pit and railway rails; about 40 tons of cast tram rails; about 10 tons of shanks and castings; several large second-hand wagon shape boilers, suitable for tanks or cisterns; 4 lifting jacks, 4 to 10 tons; 1 to lift or pull 50 tons; 4 pile drivers; 20 dobin carts; large and small 3 and 4 sheaved blocks; 1 strong hydraulic press. All on sale very cheap.
Wigan, December 9, 1862.

NEW COMBINED TURBINE, WINDING, AND PUMPING MACHINERY,
MANUFACTURED BY GEORGE LOW.

MILLGATE IRONWORKS, NEWARK-UPON-TRENT.
Who respectfully beg to bring the above to the notice of the mining public, as an exceedingly cheap and easy method of applying water-power for the above purposes.
THE TURBINE, WINDING, AND PUMPING MACHINERY are all fixed complete to one strong cast-iron bed plate, which can be placed in any situation without pit or excavation, and any height not exceeding 83 ft. from bottom of fall, the supply and suction pipe being all that is required to be connected to it, and can be brought in any direction. This combined machine can be easily removed when necessary.

G. Low begs also to state that the TURBINE is the most efficient and the cheapest method of applying water-power for mining purposes.

MANUFACTURER OF WINDING, PUMPING, CRUSHING, STAMPING MACHINERY, WINDING ENGINES, WATER WHEELS.
IMPROVED TURBINE WATER WHEELS CONSTRUCTED either to WORK VERTICALLY or HORIZONTALLY, and upon the MOST SCIENTIFIC and EFFECTIVE PRINCIPLE.

G. Low begs to recommend a special class of turbine adapted for extreme high falls (300 to 500 ft.), and consuming small quantity of water. This turbine will work with equal advantage without running at an excessive velocity. Also, MANUFACTURER OF IMPROVED BORING MACHINES for DRIVING ADITS.

DAVEY'S PATENT BLASTING POWDER,
MAN

Sheffield School of Practical Science and Metallurgy.

SHEFFIELD SCHOOL OF PRACTICAL SCIENCE AND METALLURGY.

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100 " 27 x 55 4 10 0 10 " 15 x 21 0 15 0

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4000	Bedford United (copper, Tavistock)	2 6 8	—	—	13 0 0	0 2 0—Dec, 1862
240	Bosconan (tin, St. Just)	91 5 0	—	—	455 15 0	4 0 0—Nov, 1862
918	Carroll (silver-lead, Newlyn)	15 5 7	41	40 42	1 0 0	1 0 0—Nov, 1862
1300	Carr Breck (copper, tin, Illogan)	15 0 0	62	—	273 10 0	2 0 0—Feb, 1862
256	Copper Hill (copper) Redruth	48 0 0	—	—	9 10 0	2 10 0—Sept, 1862
12000	Copper Mines of England	25 0 0	—	—	7 1/2 per cent.	—Half-yrly.
800000	Do. ditto (stock)	100 0 0	—	—	1 per cent.	—Half-yrly.
1055	Cradock Moor (copper, St. Cleer)	8 0 0	—	—	7 12 0	0 4 0—July, 1862
512	Creechbarnes and Penkell, St. Columb	—	—	—	0 10 0	0 10 0—Jan, 1862
567	Cwm Erwin (lead) Cardiganshire [L.]	7 10 0	—	—	7 13 0	0 5 0—July, 1862
128	Cwmystawl (lead, Cardiganshire)	60 0 0	—	—	247 10 0	4 0 0—Sept, 1862
280	Darwent Mines (sil., lead, Durham)	300 0 0	—	—	147 0 0	5 0 0—Sept, 1862
1024	Davies Gt. Con. (cop., Tavistock) [S.E.]	1 0 0	505	—	836 0 0	10 0 0—Nov, 1862
358	Dolcoath (copper, tin, Camborne)	128 17 6	—	—	693 10 0	7 0 0—Dec, 1862
5000	Drynwrth (lead, Wales)	12 6 6	—	—	0 15 0	0 2 0—Sept, 1862
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5144	East Caradon (copper, St. Cleer) [S.E.]	2 14 6	44 1/2	44 45	4 17 6	1 0 0—Oct, 1862
514	East Darwen (lead, Cardiganshire)	33 0 0	—	—	84 10 0	1 0 0—Oct, 1862
128	East Pool (tin, copper, Pool, Illogan)	24 5 0	—	—	220 0 0	8 0 0—Dec, 1862
7800	Foxdale (lead) Isle of Man [L.]	25 0 0	—	—	—	—July, 1862
4000	Frank Mills (lead, Devon)	3 18 6	—	—	0 16 0	0 2 0—Mar, 1862
1788	Great Wh. Porteus (tin, Breage)	30 10 0	31	30 31	36 5 0	0 5 0—Nov, 1862
280	Great Wh. Porteus (tin, Breage)	30 10 0	31	30 31	36 5 0	0 5 0—Nov, 1862
1024	Gunnis Lake (Chitlers Ad.) [S.E.]	8 10 0	—	—	21 10 0	1 15 0—Oct, 1862
1024	Herodston (sil., near Liskeard) [S.E.]	8 10 0	—	—	21 10 0	1 15 0—Oct, 1862
1000	Hibernian Mine Company	92 6 2	—	—	9 0 0	0 15 0—Oct, 1862
400	Ilaburne (lead, Cardiganshire, Wales)	18 15 0	—	—	399 10 0	4 0 0—Nov, 1862
9000	Marke Valley (copper, Cardigan)	4 10 6	9	8 1/2 8 3/4	2 4 0	4 0 0—Oct, 1862
1800	Miners Mining Co. [L.] (id.), Wrexham	25 0 0	—	—	99 18 0	7 0 0—Nov, 1862
440	Mount Pleasant (lead, Mold)	4 0 0	—	—	18 18 0	0 7 6—Aug, 1862
5936	North Trekerby (copper, St. Agnes)	1 0 0	4	3 1/2 4 1/2	0 3 0	0 1 6—Dec, 1862
5000	Ossend (lead, Flintshire)	0 8 0	—	—	0 10 4	0 0 0—Dec, 1862
4000	Par Conso (copper, St. Blaize) [S.E.]	1 2 6	—	—	36 16 0	7 0 0—Nov, 1862
202	Pear Mines (copper), Anglesey [L.]	50 0 0	—	—	47 10 0	10 0 0—Oct, 1862
400	Phoenix (copper and tin)	—	—	—	—	—
1132	Powder (tin), Uny Lelant [S.E.]	10 6 7	42	40 42	66 5 0	1 5 0—Nov, 1862
6000	Rosewell Hill and Ransom United	2 16 0	—	—	0 8 0	0 2 0—Sept, 1862
4026	Rosewarne Hills (copper)	3 7 6	—	—	0 2 0	0 2 0—Oct, 1862
16	Rosewarne (lead)	50 0 0	—	—	1250 0 0	100 0 0—Quarterly.
512	South Caradon (cop., St. Cleer) [S.E.]	1 8 0	400	385 395	391 0 0	5 0 0—Nov, 1862
512	South Tolgus (cop., Redruth, Cornwall)	8 0 0	46	43 45	73 10 0	1 0 0—May, 1862
5000	South Exmouth (lead, Chitlers Ad.)	1 0 0	—	—	0 5 0	0 5 0—Dec, 1862
512	Wh. Basset (cop., Illogan) [S.E.]	18 10 0	95	92 1/2 97 1/2	368 0 0	5 0 0—Dec, 1862
280	Spearhead Moor (tin, copper, St. Just)	31 17 6	—	—	9 15 0	1 0 0—June, 1862
940	St. Ives Conso (tin, St. Ives)	8 0 0	—	—	485 10 0	0 10 0—Aug, 1862
1000	Tincroft (cop., tin, Pool, Illogan)	9 0 0	14	13 13 1/2	11 13 6	0 5 0—Dec, 1862
1000	Trumpet Conso (tin, near Helston)	11 10 0	—	—	11 0 0	2 0 0—Dec, 1862
4000	Vigna and Clogau (copper) [L.]	2 15 0	33	31 33	4 12 6	1 0 0—Oct, 1862
5000	West Basset (copper), Illogan [S.E.]	1 10 0	—	—	23 6 0	0 6 0—Sept, 1862
1024	West Caradon (cop., Liskeard) [S.E.]	5 0 0	28	26 27	101 1 3	0 10 0—Oct, 1862
4100	West Fowey Conso (tin and copper)	7 10 0	—	—	0 19 0	0 3 0—May, 1862
1024	West Penrith (lead, Cornwall)	4 0 0	—	—	2 19 6	2 19 6—May, 1862
400	Wh. Basset (cop., Camborne) [S.E.]	47 10 0	990	980 990	368 0 0	5 0 0—Dec, 1862
512	Wh. Basset (cop., Illogan) [S.E.]	5 2 6	85	75 80	36 5 0	5 0 0—Dec, 1862
9000	Wh. Clifford Amalgamated (cop.), Gwennap	30 0 0	21	19 20	28 6 0	0 7 6—Dec, 1862
1024	Wh. Gwyllyn (tin), Penrith	2 4 0	34	31 1/2 33	2 2 0	0 10 0—Sept, 1862
1024	Wh. Harle (tin), St. Just	9 13 8	—	—	0 5 0	0 5 0—May, 1862
4000	Wh. Ludeott and Wrey (lead), St. Ives	20 10 0	10	9 1/2 10	3 2 0	1 0 0—Dec, 1862
896	Wh. Margaret (tin), Uny Lel. [S.E.]	9 17 6	49	40 42	75 5 0	1 0 0—Nov, 1862
100	Wh. Mary (tin), Lelant	36 2 6	—	—	284 5 0	4 0 0—Mar, 1862
1024	Wh. Mary Ann (id.), Menheniot [S.E.]	8 0 0	—	—	66 17 6	0 10 0—Dec, 1862
80	Wh. Owsley (tin), St. Just, Cornwall	70 0 0	—	—	310 18 0	7 10 0—Nov, 1862
128	Wh. Penrith (tin), Lelant	8 10 0	—	—	9 2 0	0 4 0—June, 1862
396	Wh. Penrith (tin), Lelant	8 10 0	—	—	144 15 0	0 0 0—Dec, 1862
1040	Wh. Trevelyan (sil., id.), Liskeard [S.E.]	5 17 0	—	—	46 2 6	0 10 0—Nov, 1862

(* Dividends paid every two months. † Dividends paid every three months.)

MINES WITH DIVIDENDS IN ABEYANCE.

700	Aberdovey (silver-lead), Merioneth	1 10 0	—	—	0 10 0	0 10 0—Mar, 1859
4943	Alfred Conso (cop.), Phillack [S.E.]	3 15 11	—	—	20 3 0	0 2 6—April, 1859
900	Cefn Cwn Brynno (lead), Cardiganshire	33 0 0	—	—	9 0 0	4 0 0—April, 1861
286	Condurrow (cop., tin), Camborne	35 0 0	—	—	85 0 0	2 0 0—June, 1861
2450	Cook's Kitchen (copper), Illogan	17 0 0	34	32 33	1 7 0	7 0 0—May, 1862
4076	Devon and Cornwall (copper)	5 18 8	—	—	0 10 0	0 2 6—Feb, 1859
473	Ding Dong (tin), Gwyllyn	40 18 6	—	—	16 7 6	1 10 0—Mar, 1857
13900	Drake (tin), St. Ives	0 10 0	—	—	0 18 0	0 10 0—June, 1862
4940	Fowey Conso (copper), Tywardreath	3 0 0	—	—	41 9 3	0 2 6—June, 1862
6000	Great South Tolgus (S.E.), Redruth	0 14 6	7 1/2	7 1/2 7 1/2	7 18 0	0 5 0—Dec, 1861
119	Great (tin), Gernoe	100 0 0	—	—	231 10 0	7 10 0—Feb, 1857
5000	Kelly Bray (lead, copper), Callington	4 15 6	—	—	0 6 0	0 2 0—Feb, 1860
160	Levant (copper, tin), St. Just	2 10 0	—	—	1091 0 0	5 0 0—May, 1860
50000	Mining Co. of Ireland (cop., lead, coal)	7 0 0	—	—	14 7 11 0	7 0 0—Dec, 1861
6000	New Birch Tor and Viller Conso (tin)	1 6 6	—	—	0 3 6	0 1 0—Sept, 1861
470	Newtownards Mining Co., Co. Down	50 0 0	—	—	56 0 0	1 0 0—Sept, 1858
6000	North Downs (copper) Redruth	2 3 4	—	—	0 10 0	0 2 6—May, 1861
1773	Polkelly (tin), St. Agnes	1 0 0	—	—	6 10 0	0 10 0—Oct, 1861
9000	Portsmouth (cop., tin), W. Liskeard	0 17 0	—	—	0 10 0	0 10 0—Feb, 1861
6000	Tolvadden (copper), Marazion	0 16 2	—	—	0 13 0	0 3 0—Mar, 1860
9000	Tamar Con. (sil., id.), Bealston [S.E.]	4 10 0	—	—	5 6 0	0 2 6—Jan, 1861
572	Trelawny Conso (tin), St. Ives	12 0 0	15	15 16	7 0 0	0 10 0—Sept, 1860
1024	Wendron Conso (tin), Wendron	11 13 10	11 1/2	10 11	8 15 0	1 0 0—Jan, 1861
60	West Burton Gill (lead), Yorksh.	50 0 0	—	—	14 10 0	3 0 0—June, 1861
256	West Damsel (copper), Gwennap	38 10 0	—	—	45 0 0	1 0 0—May, 1860
256	West Buller (cop., Redruth) [S.E.]	8 0 0	—	—	929 0 0	2 0 0—Mar, 1861
128	West Friendship (copper), Devon	50 0 0	—	—	2400 10 0	5 0 0—Feb, 1861
512	Wh. Basset (silver-lead), St. Ives	8 10 0	—	—	13 10 0	1 0 0—Mar, 1862
1024	Wh. Kitty (tin), Uny Lelant [S.E.]	0 6 6	7 1/2	—	0 18 0	0 10 0—Oct, 1862
4256	Wh. Kitty (tin), St. Agnes	4 19 6	4 1/2	3 1/2 4 1/2	0 18 0	0 2 0—July, 1862
5000	Wicklow (copper) [L.]	5 0 0	—	—	43 17 6	2 0 0—Oct, 1861

FOREIGN MINES.

2444	Burra Burr (cop.), South Australia	5 0 0	—	—	255 0 0	5 0 0—Oct, 1861
8000	Central American (silver), L.A.	5 0 0	—	—	2 0 0	0 14 6—Oct, 1862
19000	Cobra Copper Co. (cop.), Cuba [S.E.]	40 0 0	21	19 21	98 13 0	1 0 0—Jan, 1862
10000	Copio Mining Company, Chile [S.E.]	16 0 0	8 1/2	—	6 18 0	0 10 0—Nov, 1862
16000	East Indian Coal, Calcutta [L.]	10 0 0	—	—	7 1/2 per cent.	—Yearly.
70000	East and Australian [S.E.]	5 0 0	—	—	1 7 6	0 2 6—Feb, 1862
20000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0	—	—	0 2 6	0 2 6—May, 1862
20000	Gen. Mining Assoc., Nova Scotia [S.E.]	130 0 0	—	—	19 5 0	1 0 0—June, 1862
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0	—	—	0 10 0	0 1 0—June, 1862
16000	Llaneros (S.E.), Potosi, Bolivia [S.E.]	9 0 0	—	—	8 10 2	0 5 0—Sept, 1862
10000	Llaneros (S.E.), Potosi, Bolivia [S.E.]	9 0 0	—	—	0 19 6	0 1 0—Feb, 1862
08815	Marquette and New Granada [S.E.]	2 0 0	—	—	0 6 0	0 6 0—April, 1862
10000	Port Phillip (gold), Clunes [S.E.]	1 0 0	—	—	0 6 0	0 6 0—July, 1862
11000	St. John del Rey (L.), Brazil [S.E.]	15 0 0	55	54 56	54 15 0	4 0 0—Dec, 1862
48174	Unit. Mexican (sil.), Mexico [S.E.]	28 5 0	—	—	2 14 0	0 0 0—Oct, 1862
90000	West Canada Mining Company [L.]	1 0 0	—	—	0 2 0	0 2 0—Nov, 1862

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Altan and Qumangan (cop.) [L.]	4 10 0	—	—	4 5 0	0 15 0—Nov, 1859
10000	Barrier Land, Min., N. Ze. [L.]	4 10 0	—	—	15 per cent.	—May, 1859
10000	Pontgibaud (sil., lead), France [S.E.]	20 0 0	—	—	1 0 0	1 0 0—June, 1855

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
30000	Australian (copper), South Australia [S.E.]	7 7 6	..	..	Sept. 1858
20000	Beairst (tin) [L.]	0 10 0	..	..	Oct. 1862
74000	Bon Accord, South Australia (copper) [L.] [S.E.]	1 0 0	..	..	..
55000	Capula (silver), Mexico [L.] [S.E.]	0 10 0	..	..	Jan. 1858
17000	Central Italian (copper) [7000 £2 paid]	0 6 0	..	..	Jan. 1858
40000	Clarendon Consols (copper), Jamaica [S.E.]	1 2 6	..	..	July, 1858
10000	Copio Smelting [L.]	10 0 0	..	..	.. Fully paid.
100000	Don Pedro North Del Rey (gold), Brazil [L.] [S.E.]	0 10 0	..	..	Aug. 1862
75000	Don Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	..	3/4 3/4	.. Fully paid.
25000	East del Rey, Brazil [L.] [S.E.]	1 0 0	..	2 1/4 3/4	Sept. 1861
30000	East Kongberg Native Silver Mining Co. of Norway [L.]	1 0 0	..	..	Mar. 1862
15000	Elbe Colliery Company [L.]	1 0 0	..	..	.. Fully paid.
30000	Ellerslie and Bardsley, Jamaica	0 18 0	..	..	July, 1858
8000	English and Canadian Mining Company [L.]	5 0 0	..	..	.. Fully paid.
40000	Fortuna (copper), West Australia [L.]	2 0 0	..	..	.. Fully paid.
80000	Great Northern (copper), South Australia [L.] [S.E.]	1 10 0	..	..	June, 1862
34000	Hindostan (copper), Bengal [L.] [S.E.]	1 10 0	..	..	May, 1862
4000	Hope Silver-Lead and Copper Mining Co. [L.]	25 0 0	..	..	.. Fully paid.
10000	Imperial Theatrical (lead and copper), Thessaly [L.]	0 10 0	..	..	June, 1860
10000	Karibia Colliery Company [L.]	1 0 0	..	..	.. Fully paid.
10000	Laganas (sulphur, copper), Portugal [L.]	1 0 0	..	..	.. Fully paid.
100000	Montes Aures (gold), Brazil [L.] [S.E.]	2 0 0	..	2 2/4	.. Fully paid.
2000	New Burr (Australia)	5 0 0	..	..	Aug. 1862
60000	New Granada (gold), South America [S.E.]	1 0 0	..	..	.. Fully paid.
16000	New Grand Duchy of Baden (silver-lead), near Freiburg	1 0 0	..	..	Nov. 1858
60000	North Rhine Copper of South Australia [L.] [S.E.]	0 17 6	..	..	..
90000	Nova Scotia (lead and gold) [L.]	1 0 0	..	1 1/4 1 1/4	Nov. 1862
16000	Pacheco Silver Mining Company, Mexico [L.]	0 15 0	..	..	April, 1862
17000	Quadrado (copper), Venezuela [L.]	0 10 0	..	..	July, 1862
60000	Santa Barbara (gold), Brazil [L.] [S.E.]	0 10 0	..	1 1/4 3/4	Mar. 1862
90000	Scottish Australian Mining Company [L.]	0 10 0	..	1 1/4 1 1/4	..
15000	South Europe Mining Company, Spain [L.]	3 0 0	..	..	May, 1860
80000	St. John's United (copper, lead), Newfoundland [L.]	1 0 0	..	..	.. Fully paid.
12000	Teplitz Colliery Co. [L.]	2 0 0	..	..	..
15000	Vancouver (coal) [L.]	5 0 0	..	..	..
45000	Victor Emmanuel, Italy [L.] (30,000 Pref. Shares, 15s. pd., 25,000 1s. pd.)	110 0 0	..	..	..
1000	Western Africa Malachite (copper) [L.]	1 0 0	..	..	Oct. 1860
12000	Wh. Ellen, South Australia [L.]	5 0 0	..	..	.. Fully paid.
34525	Wh. Jamaica (copper)	5 0 0	..	..	.. Fully paid.
90000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0	..	..	.. Fully paid.
90000	Yudansutanans (copper), South Australia [L.]	3 0 0	..	..	.. Fully paid.